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SKIR DIVER MAGAZINE

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member of the



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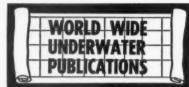
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SDM OPINION.

D URING any conversation about diving, the term "Skin Diver" usually gets tossed about carelessly. Just exactly what is a Skin Diver? Does he use a snorkel ...? A wet or dry suit ...? A lung ...?

First, let's clarify the term "Skin Diver."

To do this we must go back into history. Before scuba, before snorkels, before any of our modern equipment, divers sucked in a great breath of air, grabbed a couple of heavy stones, and sank beneath the surface for pleasure or profit. These men were the first Skin Divers in the strict sense of the word. Not particularly because of their lack of equipment, but because they sought adventure and excitement underwater just as we do. Of course we now have aids to make the search easier and more comfortable . . . snorkels, masks, flippers, lungs, etc. . . . but still a Skin Diver is, basically, one who dives beneath the surface of the water, leaving behind any depend-

With the passing of time the sport of Skin Diving was gradually divided into two separate categories. Some Skin Divers use only a snorkel and, with new inventions and improvements, some use underwater breathing devices. Two distinct possibilities, each under the general term Skin Diver. Of course most of us use both, switching from one to the other as reason demands, but this only serves to amplify their basic uses and differences under one common term.

A Skin Diver, then, is one who dives beneath the surface of the water for different periods of time depending on either physical lung

power or self-contained breathing devices.

This, you will note, excludes only "Helmet" divers who are in a completely separate category since they must depend on persons above the surface for assistance. But in the term Skin Diver are included "snorkelers," "scuba divers," the seldom used "free divers" and so called "sport divers." All are, primarily, Skin Divers, and doubtless proud of it.

Snorkelers and scuba divers we must, of course, recognize since they are the two basic subdivisions of Skin Diver. But what of the overworked, meaningless terms free-diver and sport-diver? They are only confusing titles dreamed up by persons trying to "style-ize" the sport. Granted, they have a certain ring to them, a daring, mysterious beauty that gives them a certain charm. But how many times do you hear them used officially, or see them in print when a Skin Diver does something worth recognition? No . . . once thoroughly clarified, Skin Diver is the proud name of underwater enthusiasts.

In the previously mentioned conversations, you sometimes hear a person say that only a "Skin Diver" should spear fish . . . not a person equipped with a lung. This is paradoxical. A person with a lung IS a Skin Diver. Perhaps they mean only a Skin Diver using a snorkel

should spear fish, not a Skin Diver wearing a lung.

And you've no doubt heard mentioned that Skin Divers are not able to do fine photographic work because they can't stay down long enough. Why not? A self-contained breathing device can enable the Skin Diver (and he is still a Skin Diver) to remain underwater for extended periods.

So the point is this. Regardless of equipment (providing it is selfcontained, of couse) or the lack of it, regardless of the presence or absence of an exposure suit, regardless of the length of time spent underwater, the term Skin Diver encompasses most of us interested

Whether underwater for commercial reasons or for pleasure, whether using snorkel or lung or both, we all fall under the general term SKIN DIVER and it was for this reason that SKIN DIVER MAGAZINE was so named . . . to represent ALL underwater en-

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For years Voit research and development people looked for a more lasting scuba tank finish. They wanted something that would stand up under the corrosive action of salt water, pool chlonine, sunlight. And the finish had to be resilient enough to withstand rough treatment without scratching or chipping. Vinyl seemed to offer all these advantages, if it could be bonded to metal.

They found the answer this year in a patented process developed in Germany. This process, licensed in the U.S. and Canada to the Polymer Corporation under the trade-name Corvel is known as "fluidized bed coating."



In non-technical language, the process consists of immersing the metal tank, which has been preheated to about 500°F., into a "fluidized bed of specially formulated dry Vinyl powders." At this temperature, the Vinyl powders melt and coalesce to form a continuous fusion-bonded finish that is exceptionally tough, water resistant and chemically inert.

The Corvel finish used on Voit tanks passed a 2800 hour accelerated ASTM Weatherometer test with only a slight loss of gloss. 350 hours is equal to a full year's exposure to the elements. By way of comparison, 500 hours is considered a tough test for high quality paint and 2000 hours will destroy the finest automobile finish.

finest



lung

New Voit safety tanks are Corvel-clad—a patented process that fusion-bonds a thick vinyl coating to metal. This finish will last five to ten times longer than the best enamel or galvanizing. Corvel is a registered trade-name of Polymer Corporation.



Voit's unique fiber-glass Snug-Packs (single and dual) are contoured for comfort—and have new quick-release shoulder strap.

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cover

Winter diving in Canada. With air temperature at ten degrees below zero, the Aquateers of Canada conduct training dives through three and one half feet of ice into water of thirty-one degrees. Photo was taken on a dull day by D. Green, official photographer of the Aquateers, using a Rolleiflex 2.8.

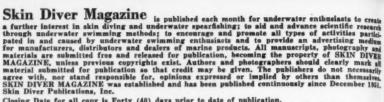
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Lloyd Bri Monica Blu Parry Biven. dom of the ! lin Ross, 67. 28, Californ

SKIN DIV





You are no doubt aware that I am about make my appearance in the publication field with a book on diving, "Mask and flippers," which will be on the market any day now. I thought you might be interested in knowing why I embarked on such an endeavor.

Ever since I took on the character of Mike Nelson in "Sea Hunt" I became in-crasingly absorbed with diving. I liked doing as much of it as I could, enjoyed alking and reading about it. As the popularity of "Sea Hunt" grew throughout the muntry I began to receive hundreds of letters containing all kinds of questions about diving, questions from children, from parents, from other divers. The attempt to answer them all fully and adequately was impossible on an individual basis, and it concerned me that I was not able to re-pond properly to the enormous expression of interest that was shown.

One day I got talking about this prob-lem with Bill Barada, whom I knew not only as a thoroughly experienced diver but have book on diving, so we put our heads together in collaboration, and in due time
"Mask and Flippers" was ready.

It is our sincere hope that this material

will be helpful and rewarding to its readers.

Leons Briga

"Mask and Flippers" will certainly fulfill the wishes of its authors. The advance copy in the offices of SDM is already dog-eared and the waiting line is growing more and more impatient. From chapter one "Invita-tion to Adventure" to chapter ten "A Look at the Future" Bridges and Barada have captured diving as it appeals to the majority captured atiting as it appears to the majority of us. May we suggest you turn to Underwater Bookshelf in this issue, order your copy, and prepare yourself for several hours of very enjoyable reading.

Any skin divers interested in corresponding with someone in England? I am 17 and akeen beginner in underwater photography. The water visibility around the English coast is about 10 to 20 feet so I have a lot of problems. I hope someone can help me.

Geoffrey Davies 18 Bindon Close, Parkstone, Poole, Dorset, England

. I would like to communicate with the following. Lloyd Bridges (Sea Hunt) and Zale Parry Bivens and Col. John D. Craig Kingdom of the Sea). Please furnish address in Readers' Ripples as soon as possible. Thank you.

M. E. Molnar New York, New York Lloyd Bridges, cfo ZIV TV, 7324 Santa Monica Blvd., Los Angeles 46, Calif. Zale Parry Bivens and Col. John D. Craig, Kingdom of the Sea, Emperor Productions, Mar-in Ross, 6757 Hollywood Blvd., Hollywood 28, California.

. With this letter I declare that I was a secretary of a student's boarding school "Students Centre, Indonesia." These students are interested in the exchange of art and culture with the readers of your publication. Anything from your country would be of interest to these students.

I can offer in return such things as leather craft, hand work, wood craft, sculptures and other Indonesian culture. I am particularly interested in receiving materials for writing, painting, mechanical drawing, hunting, fishing, diving and also such things as old large magazines, newspapers, etc. Please inform your readers of my wishes on behalf of the students.

Mr. Ilticham Djl. Abubakarali #16 Jogjakarta, Java Indonesia

.. As an avid reader of your publication, I've noticed the mention of explorer units who have used scuba as the theme of the post. This is a program not accepted in scouting and I feel that they are out of

line in using such an activity.

The reason why makes no difference, it is still national policy and therefore should not be done.

However, as it has been used for eyewash to build the explorer program in Life as well as on TV, it leaves a strong distaste for someone's (?) idea of promotion.

As an Adult Leader in a program located at a reform institution, I have developed a program from Morgan's "Diving with Safety" and Owen's "A Manual For Free Divers." The class may start out with 30 boys and wind up with five, and even then these lads — completely understand that they have only taken basic training, and if they are to go on, they are to attend a regular standard course. Skin diving is real big stuff in the unit, and when a boy washes out he fully knows the reason. This program has proven to be a terrific motivating factor in reform and although that may sound trite, nothing else has ever captured the attention of the most aggresive inmate with so much force.

I enjoy your magazine and get a charge out of Kohler and his fresh type of humor. John F. Sullivan 2202 Burlington St.

Ottawa, Ill.

We have a great admiration for Mr. Sullivan's work, however we are informed by the National Council, Boy Scouts of America, that though they do not re-commend the use of scuba at camps on a national level, they do sanction explorer units using scuba as a part of their program on a more local level. Dependent, of course, on what the boys wish to select as their program and the availability of qualified in-structor/leaders. Age, a greater number of boys, and lack of time for proper training are their main objections to the use of scuba on a grand scale.

. I find your magazine quite informative. However, having an abundance of various diving literature on hand, there is one bit of knowledge that escapes me.

With all the available figures on depths, record dives, etc., there cannot seem to be found decisive figures on deep dives using scuba with compressed air only.

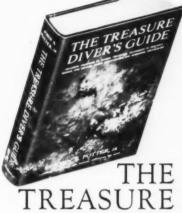
Or simply, how far down can one go using compressed air and scuba before one must switch to helium-oxygen mixtures? Vic Olynyk

RR 1 Fort William

Ontario, Canada As you further mention in your letter Vic individuals differ regarding the effects of nitrogen and nitrogen narcossis. You might check Olney's Overseas Observations in this issue for a new record claim.

Just publisheda perfect Christmas present-the most comprehensive. authoritative guide to underwater

riches



DIVERS

by John S. Potter, Jr. Author of The Treasure Divers of Vigo Bay

A big, deluxe gift box that will de-light every skin diver and treasure hunter, this unique volume contains the latest information on sunken treasure throughout the world, locations and values, techniques of research and salvage, wreck identification, and submarine archaeology.

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DANIEL STACK, President, Treasure Hunters, Inc.

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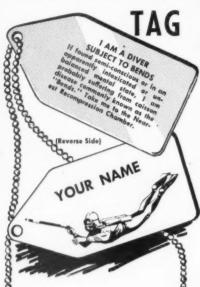
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Reader's Ripples

. In this part of Texas there are not many divers so we are not as well informed about current diving events as in areas where divers are well-numbered. My diving buddy and I would like to put a scuba diving exhibition in our local fair. We have seen several articles in SDM about homemade diving tanks as in your June issue of San Antonio's exhibition. We would appreciate any and all letters on these tanks.

Thanks for your co-operation and keep up the good work with SKIN DIVER MAGAZINE. Divers couldn't get along

without you in our opinion.

Jimmy Pearson 204 Sunset Dr. Marshall, Texas

. . I would like to take this opportunity to invite any and all skin divers that might possibly visit Bermuda to join us in our excursions in the local area. There is an abundance of wrecks, reefs and caves and, without exception, they all make for wonderful dives.

Upon arrival in Bermuda, contact Joe Welch, Kindley extension 5159, or Bob Reeves, Kindley extension 2215. I hope the Kindley Skin Divers Club can

be of future service.

Robert A. Reeves Secretary, Kindley Skin Divers Club Kindley AFB

Bill Barada

. . I don't think you remember me but I'm the twelve-year-old boy who wrote you that I'm getting an "Aqua-Lung" for Christmas. Here are the main parts of your reply.

Dear Terry I'm glad you liked the book but your statement that you are getting an "Aqua-Lung" for Christmas scares me. Using breathing equipment is very dangerous unless you have a competent course of instruc-tion and you know what you are doing. It can kill you in only six or seven feet of water. Have fun snorkeling and leave the lung alone till you're at least sixteen. Then

take lessons.'

I have a subscription to "Skin Diver Magazine," I'm an excellent swimmer, in good health, have a very large bone structure, and know the safety curve, decompression tables and physics. In addition I've always intended to take lessons. I'd like to call your attention to the book "Boy Be-neath The Sea," by Mike Wilson with text by Arthur Clarke. It has pictures of two by Arthur Clarke. It has pictures of two boys scuba diving. In the epilogue it says, "you cannot start diving too young, the boys you've met here were only eight when they began," and in the book the "Skin Diver," by Elgin Clampi it says "anyone in good health from 10 to 100 that feels at home in the water can skin dive" with this argument I wish you'd reconsider your advice and reply. Enclosed is a stamped self addressed envelope, with your reply would you please send your autograph on a separate piece of paper?

Terry Cobb 2026 N. Bissell St. Chicago 14, Illinois Dear Terry:

Your present valid arguments in favor of young men under the age of sixteen beginning skin diving. However, my reasons for recommending that you learn snorkel diving first and forget about a lung until you are at least sixteen had nothing to do with bone structure or swimming ability. In fact you will find that most experienced skin diven recommend that adults learn snorkel diving before attempting to use scuba. The reason is simple and, I think, valid. By becoming a competent snorkel diver, you learn what you can accomplish underwater without an air supply. Then, when using scuba, you know what you can do if your air is cut off and you are much less subject to panic,

Also, scuba diving not only requires a knowledge of the safety rules, it often requires a more mature judgement than is ordinarily attributed to a 12 year old. Anyone can use a scuba as long as everything goes O.K. But when things go wrong, as they invariably do, a diver must draw upon experience and judgement in order to reach the surface safely. It is a great deal similar to the reasoning behind the law that prohibits youngsters under 16 from driving an automobile. In fact, many people believe that 16 is too young for so much respon-

sibility.

Remember, while skin diving with a snorkel and holding your breath, you can-not get into much more trouble than you can while swimming. But with a lung, one mistake can kill you in water as shallow as six or seven feet. This is air embolism caused by holding your breath on the way to the surface. This single danger has killed more skin divers than any other cause and many of my personal friends are among its victims.

I have two sons who have both been diving with me since they were four years old. But neither of them were allowed to use a scuba until they reached sixteen. Both of the boys were competent skin divers before they were eight years old. The only times I ever permitted them to try a scuba was in shallow water in a location where I could watch their every move. And I was diving with them.

Skin diving is a wonderful sport and as safe as almost any other, once you learn the rules and gain the necessary knowledge. But, as in any exciting sport, there are certain inherent dangers which cannot be avoided. Most of us advocate an indoctrination into the sport which will insure the beginning diver of a reasonable chance to live, and enjoy skin diving for a long time.

I am sending this letter along with your to "Skin Diver" in the hope that other divers will write you their opinion.

Bill Barada

REG

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COLO

I am a young (14) admirer of the finer arts (Diving). I have been wondering why SDM isn't published semi-monthly. By the time you finish one issue you have to wait a whole month before SDM rolls around again.

I have always thought, and still do think SDM is the best on the stands.

Keep up the good work!

Steve Sinsley 1123 Bay Drive Miami Beach, Florida

Thanks for the kind words, Steve.

. . Some of the companies I do diving work for require me to have liability and property damage insurance. However I haven't been able to find an insurance company that will handle that type of policy. Do you know of one? If so, please let me know

Bill Crawford 202 West Main La Porte, Texas

SKIN DIVER-December 1960

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SKIN DIVING JEWELRY

risely detailed silver or gold finished inwelry Authentic reproductions worth early dollars more. Each item is individually sift boxed. The "Aqua-Lung" is a maxing raproduction of tank, regulater, horness, and the production of tank, regulater, horness, and the production of tank, regulater, horness, and the part of the first production of the Cressi Rondine (or Squale) fin is also available in the above layers.

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UNDERWATER

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Strongest stainless an Strongest stainless an Case made. Fully give anised to 600 ft. Nea ne servicing for 3 well and Ultra luminous dial at the n day surbreaked mainspring, and surbreaked hand; rugged yet at fractive, show protect at 17 iswels. Nation at 17 iswels. Nation

SPOTLIGHT

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RETCH 3/16" SKIN 2 Sides

In conjunction with a leading suit manufacturer Central brings you a 3/16" black suit of the finest first quality Neoprene skin 2 sides complete except for gluing. WE custom cut to your size! WE double stitch and glue in a deluxe heavy duty zipper! WE glue in a deluxe heavy duty zipper! WE glue and double stitch and we shape with the stitch and glue in a spin shap behind zipper! WE glue in a spin shap behind zipper! WE glue in a spin shap behind zipper! WE glue and stripping in your choice of black, this repen, or yellow, and complete we will be shaped and complete with the shape with the shape shaped shap H b G)

T. New long glove mitts.

Send following sizes: Neck, chest, waist, hips, ankle, wrist, crotch to ankle, center of back to wrist, full height, hat size, shoe size, glove size, complete, shirt, pants, hood, boots & gloves, size, shoe size, shoe size, shoe size, shoe size, shoe size, shirt, pants, hood, boots & gloves, shirt, pants, hood, boots & gloves, shirt, pants, hood, boots & gloves, shirt, pants, hood, boots & shown. This \$54.50 value complete as shown.

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PRO... Reader's Ripples

QUALITY YOU CAN COUNT ON

The PRO



 There are many reasons why PRO is the choice of more and more SCUBA divers . . . the easier breathing from PRO's "pressure equalizer" mouthpiece . . . the modern inverted cylinder . . . the strong, single low pressure hose . . . the aircraft-type corrosionproof materials . . . the fully adjustable harness and contour back plate . . . the compact reducing valve . . . all these are good reasons for buying PRO. But perhaps the most important reason that SCUBA divers are going PRO is the consistent performance of this superb unit. Letters from PRO owners throughout the world acclaim the PRO as an outstanding performer under all conditions.

Write for Catalog

ROSE AVIATION, INC.



LUAU REPORT

... Early Sunday morning September 18th, many months of planning began to pay off. Very rapidly, after the trucks were unloaded, a section of the beach at Salt Creek started to sprout palm fronds. In a matter of three hours, there lay before us a perfect setting for a Polenesian luau.

Eager to get into the water and cool off, the divers started their four-hour spearfishing contest. As the last diver entered the water a few unfortunate souls readied the fire pits and brewed their sauces.

Meanwhile, several schools of game fish had moved close to shore and encountered our goggle-heads. Also making their last trip to the surface were some local reef fish. Now the contest was over and after carefully measuring and weighing in all catches, winners in the different classes were determined.

Our appetites certainly needed no whetting. Included in the Luau menu was chicken rice-noodle soup, barbecued pork, smoked fish, spiced shrimp, limed white sea bass, fresh corn, baked yams, several kinds of salads all washed down with punch. Decorating low tables were mounds of fresh tropical fruits. By now members and their guests, so pot-bellied they couldn't move, in their final effort for the evening, cleaned up these fruits as a finale.

Under flickering tiki torches a group of glassy-eyed people judged costume contests, heard children singing Hawaiian songs and finally a diving movie. This all ended just as our gasoline generator gave up and died. All agreed that it was too much work, but next year, I'm sure, will find us eagerly preparing for another luau.

John Miller Newport Harbor Sub-Mariners

... Could any of your readers please supply me with information on how to prepare and train a team of divers for a National Spearfishing Championship? What kind of physical training should be practiced and what diet should be followed. Which phases of spearfishing should be prepared and to what extent?

> Andris Lidums Federal Overseas Liason Officer U.S.F.A. of Australia 6 Myrtlebank Terrace Stonyfell, Adelaide S. Australia

. . . First of all, just a word of praise to your excellent presentation of interesting stories and articles in your magazine.

Thomas Jones and myself are ardent skin divers ourselves, both dedicated to safety and service. Last May 17, 1960, we joined as a two-man scuba team and call ourselves the "Bluefins." Even though Tom has been diving only two years and myself since May, we have attained a fair knowledge of safety and research to help us become a good team. I am a senior life-saver and also a life guard in my off time. We have an indoor pool here on the base, so after hours Tom and I train every chance we get. We have at total of approximately 140 hours training indoors and are now doing exhaustive research on the hazards of lake diving in the Black Hills. We also have future plans to dive for gold here in South Dakota.

We have been accepted on the Underwater Recovery Team of the Rapid City Police Force. Most of our dives have been in poor visibility (10-25 feet) and therefore we are very aware of the important role of safety. Our big subject for the winter is to form a research team from the Force and devise safer methods and better ways to dive under ice.

The Bluefins Tom Jones Mike Johnston Ellsworth AFB So. Dakota Kenneth

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"I've or

... I am interested in obtaining a February, 1954, issue of "Skin Diver Magazine." Can any of your readers help?

> J. B. Bullard Jr. 8008 Spottswood Rd. Richmond 26, Virginia

. . . I would appreciate it very much if a member of the Manhattan Skin Divers Club would contact me in regards to Murry Seliger's test case. There are a few of us here in Detroit that would like to know the outcome of his trial.

Robert L. Davis 1709 Glendale Detroit 38, Michigan

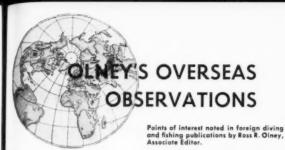
Murray was arrested while diving of Montauk Point, Long Island, New York, in an area recently declared illegal for diving by the local city council. The first trial was lost by the diver and has been appealed.



. . . Just returned to Hollywood after three months of film locations in Tarpon Springs, Florida (see snapshot). Our crew sure found SDM informative, exciting and of value on photography underwater. The "Personality Spotlight" is very interesting and "News Current" puts just the right amount of news around the nation to make the magazine a reader's must. The picture we filmed is a true life film short subject on sponge diving in which you will see yours truly, shortly at movie houses everywhere. Chuck Finley

607 S. Cloverdale Los Angeles 36, California

SKIN DIVER-December 1960



Kenneth G. Steward of Australia has killed 500 sharks with a

baseball bat.

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Developing his hatred for sharks after a friend was killed by me, Steward obtained his shark killing outfit of the bat, a meathook, 250 feet of twine and heavy gloves, and went to work. His system is to coax them onto the hook, haul them to the boat with

"They get concussion . . ." explains Ken.
In 1934 Ken and his friend were swimming at their usual place along the beach when the man-eater struck, and his personal vendetta began. Soon he had taken a black Whaler nearly twelve feet long . . . possibly the same one which killed his friend . . . and he's

been at it ever since.

"I've only really been scared once," says Ken. "We pulled a nine-footer to the boat one day and before I had a chance to belay nine-footer to the boat one day and before I had a chance to belay him, he lunged. He was lying across me suddenly, breathing right into my face. From that close up, a nine foot shark looks reasonably big," Ken reports dryly.—(Angler's Digest)

Among proposals for obtaining emergency drinking water at sea is squeezing the body fluids from freshly-caught fish. It is actually recommended in some survival manuals. Now the Royal

Navy wishes to explode this myth.

A manually operated, stainless steel "fish press," capable of eretting tremendous force, was constructed during tests conducted by British naval researchers. Pressure was exerted by a fine pitched screw ram, turned by an extension lever.

Even with this large and cumbersome device, only a few cubic centimeters of body juice could be obtained from a fair sized fish. Fish, it would appear, are for eating, not squeezing-(Sea Fron-

We have strong opinions about Diving Licences. We're agin 'em. But we think the time is rapidly approaching when we'll need Diving Driving Licences to control underwater scooter traffic. First what side of which. Who, for instance, has the right of way when two scooters meet slap in the middle of Durdle Door? Are two up on a scooter illegal? What's the speed limit? Do you need lights on a parked scooter? Do you have to report it when you knock a fish down? We recommend the immediate formation of an Underwater Highways and Byways Commission to examine the

problem.—(Triton)
Three European divers, Ennio Falco, Alberto Novelli and Cesar
Olgiai have established a new depth record of 429.68 feet off the Italian Coast. The dive was very carefully supervised under the control of the Italian Federation of Sport Fishing.

The divers carried special punches to mark the plastic plaques fixed to a taut straight line. The dive was made on compressed air with the tanks officially charged by the Italian Navy and the

divers were using equipment invented by Novelli.

The dive is more interesting because it has been considered almost certain death to dive deeper than 300 feet without special mixtures of oxygen and helium being used.

Further information on what type of equipment was used, how

In the dive took on the ascent, effects of the great pressure, etc. will be forthcoming.—(Angler's Digest)

A DIVER'S NIGHTMARE... That one day, before that special someone, when you're heaving away at your wet suit trousers and your swimming trunks DO come off with them.—

During a recent Congress on Lifesaving methods held in Austalia, the Underwater Research Group demonstrated to top life-saving people a new and very effective lifeline. Simple and effici-ent, instead of being solid woven cord the line is welding hose carrying a supply of oxygen to the rescuer. This enables him to hattle through rough surf with minimum exhaustion because he

is being supplied with oxygen. Then, when the rescuer reaches the patient, the supply of oxygen is immediate and effective. The supply of oxygen is from a

master cylinder on shore.

All underwater men know that to breath pure oxygen below 25 feet can be dangerous to a diver but many will be quick to realize that a struggling lifesaver, being fed with oxygen when swimming through crashing surf, would have a tremendous aid which is then immediately available to the person in distress.— (Angler's Digest)

DIVERS' CALENDAR

Philadelphia Sea Horses Showing of Rachael Carson's "The Sea Around Us" and Cousteau's "Ten Fathoms Deep," mid-city YWCA, 2027 Chesnut, Philadelphia, 8 p.m.

December 9

Department of Fish and Game meeting on 1961 fishing regulations including two proposals affecting divers, prohibiting spearfishing for black sea bass and prohibiting underwater spearfishing in inland waters, Los Angeles.

December 25

Merry Christmas from the staff at SDM.

December 26- January 4, 1961
Australian National Skin Diving and Spearfishing Championships, Phillip Island, Victoria, under auspices of U.S.F.A. of Austrolia.

December 31

Atlantic Skin Diving Council Annual Dance.

December 31

New Orleans scuba diving contest deadline, midnight.

January 4

Competitive Spearfishing Committee, Roosevelt Park, Los Angeles, Calif., 7:30 p.m.

January 6-7

Underwater Photographic Society national exhibition movies, black and white prints and color slides.

January 6, 7, 8

Third annual Santa Clara Valley Boat, Travel and Sports show, Santa Clara County Fairgrounds, San Jose, Calif.

January 11

Captain Jacques Cousteau underwater films, Bushnell Memorial Auditorium, Hartford, Conn., 8:15 p.m.

January 14

Louisiana Council of Underwater Diving Clubs annual meeting and banquet, New Orleans.

January 15

Metro Chicago YMCA indoor competition, Austin YMCA, 10 a.m.

January 18

Los Angeles County Department of Parks and Recreation 10th Annual Underwater Instructors certification course.

January 20-21

Fourth Annual Underwater Film Festival, Santa Monica Civic Auditorium, Santa Monica, Calif. Underwater Photographic Society.

January 22

Northeast Council, Nubble Light tournament, York Beach, Maine.

January 22 Illinois Council of Skin and Scuba Divers Inc. Divers certification (location to be announced).

January 22-26

National Sporting Goods Show, Morrison Hotel and Palmer House, Chicago, Illinois.

January 29

Illinois Council of Skin and Scuba Divers Inc. Expert diver certification (location to be announced).

February 12 Conference of California Councils, Greater Los Angeles Council of Divers.

March (tentative)

Second annual MAUC convention.

March 25

Deadline for Illinois Council of Skin and Scuba Divers Inc. photography contest.

Northeast Council, two-day second class diver certification seminar, Christmas Island, Weirs Blvd., N.H.

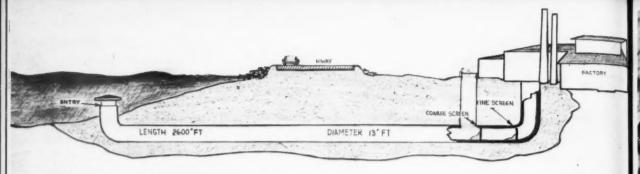
August 23-25

National Scuba Triathlon finals, New Orleans.

August 25-27

Underwater Society of America convention, New Orleans.

SKIN DIVER—December 1960



Shooting THE TUBE

By RON CHURCH

Scientific Diving Consultants

A QUARTER of a mile to air and freedom in either direc-

The thought was flashing through my mind: What if the regulator stops? What if one of the bottles of my twin 55 tanks stops feeding? The regulator is starting to breathe hard. I can't possibly be out of air already; it must be my imagination. I swam to the top of the pipe assuring myself there was no way out. I stopped and listened carefully for the hiss and bubbling of the regulator of Earl Murray, my most capable buddy on this one half mile swim in the close confines of the 10' diameter pipe. For a split second claustrophobia tried to get at me as I thought of one of the best friends I ever had, Connie Limbaugh, and how he must have felt, lost and running out of air. I told myself not to worry, this was no sweat, we had done it once before.

But you just can't stop being concerned, because you never know exactly how far you are through or what you are going to run into. For a moment I could not see Earl's light. I remembered our hard fast agreement that I would lead always, and he would never knowingly pass me. I knew, then, that he could only be behind me. Soon his light was visible flashing back and forth in the murky water and pitch blackness. We had taped a flashlight to my leg pointing backwards so that he could keep me in view at all times. He looked calm and it reasured me that that this was just another job and to get back to photographing the bottom and seams of the pipe.

I began to think subconsciously about the phone call from Earl about this job.

He had said, "Hi, Ron, this is Earl, looks like we've got another one of those pipe jobs like the one we did at Huntington Beach. How about it, still feel game?"

"Yeah, sure," I replied, almost choking, as a funny tingling sensation ran up my spine remembering about the last one.

"Is your gear all in shape and ready to go?" he asked.

"Yeah, all I have to do is make another wand. I lost the other one."

The wand is a small rod which hooks to the bottom of my Rolleimarin at a prefocussed distance. In the complete blackness of the tunnel you don't have to focus, but merely put the wand against the subject and flash it.

Earl's voice cracked through again as he said, "I got a call from Jim Griswold of Edison Company at El Segundo. He said he heard about the job we did at Huntington Beach and wants us to come up and look over the set-up at El Segundo. How about going up Monday and looking at it?"

I replied "Sure, sounds good."

After squirming through the snarled-up traffic and smog in our Volkswagens we arrived at the Edison plant near Manhattan Beach. It was a beautiful day. The surf was flat and calm and for this area the water was unusually clear. Our apprehension about one foot visibility was gone as we entered Mr. Griswold's office and he introduced us to Mr. Porter, the plant manager. They discussed with us just what they wanted done, and we in turn told them what safety precautions must be taken and what we could offer them. It was finally agreed that we would return Wednesday and Thursday to do the job.

Before going any further, I should explain what these pipes are used for. One pipe 2600 feet long extends out from shore to a depth of about 40 feet and is entirely under the surface of the sand. At the end there is a pipe coming up to within 20 feet of the surface. The ocean water is sucked in here and goes to the plant through the pipe after passing through a settling basin and a screen well where fish, shells and miscellaneous items are filtered out. It is then pumped in and cools the steam turbines that generate power, and is finally returned to the ocean by another pipe adjacent to the intake but only 2100' long. The water coming out is considerably heated by the turbines and is about 88 degrees. Swimming into the exhaust gets very uncom-

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Baby octop ing bars ar





Remains of shark which was trapped in tube and finally stopped by straining screen.

Author Ron Church on right with Earl Murray just before entering tube. Note extra tank on back and spare regulator strapped to Church's just arm.

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Baby octopus is happy in home between straining bars and eyes intruders warily.



fortable with extreme heat, but we only swam 500 feet in and then returned.

After shooting pictures all around the exhaust structure and inside the exhaust pipe, we went to the intake pipe to do the same thing. We had quite a hard time locating the stand pipe, but soon hooked it by dragging the anchor. We checked the velocity cap which is located at the top of the stand pipe, to frighten fish away and keep them from being sucked into the pipe. The complete structure and environment around it was in very good shape, and nothing seemed to be out of order. Preparations were then made for the big dive the next morning.

We arrived bright and early and after making our way by boat through some fog, arrived at the diving location. Radio communication to the beach was checked out as we started donning our gear. Earl was using double 70s and I was wearing twin 55s with a small 22 cu. ft. bottle strapped in the middle and on the back. On the small bottle I had a spare Waterlung regulator that I had strapped to my arm in case either one of us had a regulator malfunction.

Previous arrangements had been made that if we did not show up within one hour in the plant, that they would reverse the 0.7 knot flow we were going in with, to aid us in getting back in case of an impassable obstruction in the tube. The time was getting short, and the tension and apprehension building up.

An excited voice barked out, "the divers are entering the water!"

The cold water felt refreshing after sweating to get the gear on. We started down through the murkey water. The rocks came into view. We worked up to the stand pipe cover. The black formidable gap popped into view and I could see the fish darting in and out of the currents created by the suction of the pipe. I made a last minute check of my equipment and Earl's, then he helped me guide my bottles through the narrow gap. Now it was dark, very dark. Our flashlights were almost useless because our eyes were not accustomed to the darkness.

At first we could not find the opening to the main tunnel, but then we were automatically sucked in when we neared it. We were on our way. A half a mile to go before we could surface. The first few lengths of pipe were considerably covered with plant and animal growth, but as we got

(Continued on Page 29)



Captain S. Kronhaus in his Southern California home continues study of his method of raising the famed Andrea Doria. (Photo by Phillip Hoffman)



The famous lifesaving suit responsible for the survival of countless merchant seamen, and its inventor.

WITH MY TEETH . . .

AND TWO GOOD SKIN DIVERS

By

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SKIN DIVER-December 1960

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"I will rase the Andrea Doria!" You hear this and you exhale inultingly loud.

"Yeah, sure you will. You and the ther dream divers! Tell me buddyjust how?"

"With my teeth!"

Isn't this just too much, you think yourself? But aloud you say:

"With your teeth?" And you make mental note to avoid repetition.

"With my teeth and with a couple of experienced skin divers" is the remark that interrupts.

"They have the mobility that a hard hat diver will never have," the

So you look at him. Real closely, why not? You've been reading about him in the newspapers for the last two months. That's because a couple of nationally noted financiers believe in him as much as he believes in himglf. And frankly—that's plenty.

Secondly, you listen because he has carried out his plans in the past. It's on maritime records from here to the

China coast.

He is Capt. S. Kronhaus and he looks very wiry. He smiles at you and you know he is enjoying your reaction over that "teeth" remark.

"Skin divers and your teeth," you

"And something else, too. I call it God's power.'

Well, that's fine. But you're not a guv who likes word games. Teeth, skin divers and God's power! Talk has always been easy.

"The Andrea Doria will never be taken by force! I can bring her up in a way the world has never seen," Kronhaus declares.

You think about leaving abruptly,

There's still his background. And there is the man himself, actually radiating the image of a dynamo.

There are his maritime inventions, also. But haven't salvors all over the world studied the Andrea Doria and concluded she's found her final berth?

But, too, spectators of a past decade also declared the Wright brothers would never raise the airplane from the ground-until they saw it

happen.

1960

Kronhaus regards the Andea Doria as a beckoning love. She was the 29,100 ton pride of the Italian commercial fleet until she sunk on the night of July 25, 1956, off the coast of Nantucket, Rhode Island. She sank with a tearing roar into a silt ocean floor 225 feet down. She carried with her the distinction of being the greatest commercial sea loss since the illustrious Titanic, which was lost to the world on April 14, 1912, to mark an end of the opulent Edwardian era.

The Andria Doria had been the pride of the Ansaldo Shipyards near Genoa, Italy. She carried her stateliness in a line longer than two football fields-697 feet overall, and 11 decks

She'd presumably be hitting her capable speed of 26 knots today-if she hadn't collided with the S.S. Stockholm. Forty - three passengers went down with her that night.

Also lost was her millions of dollars in cargo, including a prototype sports car designed by Chrysler, built by Ghia of Italy-and valued at more than \$50,000.

The figure is minor compared to her overall wealth in her No Man's Land of the sea lanes. This is all a matter of record familiar to the world.

But Kronhaus' record is also documented. That's why he reads the recent magazine story entitled "Why They Can't Raise The Andrea Doria" and fails to be amused. There seems to be a sincere sorrow within him concerning collisions at sea.

So on his record is his patented invention designed to make collisions a thing of the past. Sea Brakes. The name means exactly what it implies. They prevent within seconds the forward motion of a craft on the water's

surface.

They have been perfected and are presently being readied for installment on Kronhaus' \$65,000 vacht moored near San Pedro, California.

He will demonstrate them to maritime officials off Catalina Island, California, in several months. He will be at the helm, using a rock shoal as the target he will inventively avoid, releases state.

Heightening interest in them is that only a short time ago the destroyer USS Ammen rode through early morning fog off Newport Beach, California with that quiet grace inherent in warships.

But at 9:20 a.m., a second American destroyer, the Collett, cut through the same overcast. She knifed into the Ammen's quarterdeck. Eleven of the Ammen's crewmen were killed.

A naval inquiry is still to release its results from the Pentagon. Why did this happen? What of the radar operators? These questions have vet to be answered.

But Kronhaus, who makes his home at 4012 Shelburn Court in Los Angeles' Highland Park district claims to have the answer for that, too.

Simply, his Sea Brakes.

They work on the sonar principle

and they work either automatically or manually. They respond from soundwaves within the water which open hydraulically operative flaps preventing further forward motion.

This function is triggered when a second vessel crosses a light beam similar in operation to those found in the doorways of super markets. Designed for inexpensive installment even on small craft, they also have a detective device for avoiding submerged shoals', rock, and debris.

A reported bonus advantage to

them is their use in docking a large ship. They will make unnecessary the usual use of tugboats for berthing. The flaps sharply increase maneuverability of the ship.

While some national agencies await with understandable interest, Kronhaus considers the introduction of the

Sea Brakes a past fact.

His wartime invention was the Life Saving Suit which top ranking naval officials rated as one that saved countless Merchant Marine lives during World War II, thereby helping to win victory for the United States.

It enabled seamen to remain warm and comfortable, as well as dry while awaiting rescue from North Atlantic

or Pacific waters.

Its built-in pockets contained such necessities as food, first-aid equipment and even such comforts as cigarettes.

It weighted 10 pounds and could be put on within two minutes.

"It was also shark proof," Kronhaus declares. Well, this figures. Didn't he test it himself one night in the early 40's nearly 10 miles off the California coast? He did.

When the government gratefully accepted and produced it by the thousands, Kronhaus set about giving his own thanks: To movie actors Victor Mature and the late Humphrey Bogart. Both had aided Kronhaus in exhibiting the suit. That's in the rec-

So why did he happen to invent the suit or the sea brakes system at all?

You ask him.

"Because I wanted to pay a debt," he tells you.

"To who?"

"To the United States for giving me freedom."

He tells you that freedom to him is simply the use of your own abilities in the making of your own way of life.

"Give me some equipment and some skin divers and I'll make the Andrea Doria come up intact. That'll be my best installment," Kronhaus

You listen some more, not quite (Continued on next Page)

WITH MY TEETH . . .

getting this alleged need for repayment. Is there some kind of guilt com-

plex here?

For a guy who can also add the invention of an underwater sea scaffold designed to fit all types of vessels, and is produced extensively under the name of Underwater Marine Scaffold what else does he want besides the Andrea Doria? He's also got a room littered with information of the sea's sunken wealth-a wealth exceeding that of the world's banks.

You question, you get answered clearly. For him it is a look back in anger. Kronhaus looks back to see:

The struggle for survival in a Russian seaport in 1897. His father, the deceased Capt. Michael Kronhaus was a commercial fleet owner of great note. The surname means royal house in Russia.

This honor was a result of a former family invention which the governsuccessfully employed during its earlier strife with Turkey. It involved communications at sea. It helped Russia win.

But the struggle for existence was due to the Czarist political move-

Kronhaus graduated from the Irkutsck Officers School in Siberia, and later from the Russian equivalent of Annapolis, commissioned a captain in both instances.

He later led Cossacks against the Red Russian movement in Mongolian Siberia. After several combat wounds he saw his father's merchant fleet confisticated by the Red army-and his freedom-fighter brother die before a communist firing squad at the age

Kronhaus escaped to China with his younger sister, Luba, who also now resides in the Highland Park area. With him he brought a knowledge of diving operations learned from his father since the age of nine.

But in China he met new troubles. Why should the Chinese government feed an escaped Russian and a small

Brashly, Kronhaus obtained an interview with the local Manchurian warlord.

"I can raise ships from the bottom." The warlord awoke with interest.

"There are two ships on the bottom of the Sungari River, near Harbin. They are blocking the channel. I will get more details . . ." Papers were exchanged.

But Kronhaus got his own details and returned to the warlord. He found the two heavy steamers were

down in 33 feet of water, resting levelly on a sand bottom. The water temperature was 28 degrees above zero, and the vessels had been sunk by an ice flow. They were resting beside each other.

"I can raise them," Kronhaus announced.

"I need some men, a large barge . some diving equipment.'

The warlord regarded Kronhaus with interest.

"What else do you need? he asked. "Five and a half hours . . ."

Kronhaus was wrong.

He only needed five hours and 20 minutes, according to files.

After towing the huge barge over the two sunken ships, he sank it by degrees until it was beneath tandom wooden beams he had lashed the stricken vessels together with.

The barge was not totally submerged, and at low tide it still protruded above the water. But, with the combined power of a pumping operaion and the rise of the tide, the barge fully surfaced - bringing along the two sunken steamers.

The warlord thought Kronhaus was a genius. He didn't know the captain had raised 65 other ships from the Red, Yellow and Black seas previously.

But when the war clouds of a Chinese and Japanese making developed, Kronhaus again fled with his sister, this time to the United States and asylum. In 1941 he gained citizenship.

Friends, aware of the Kronhaus name, sought him out. In a new nation, this was comforting. He settled in the Southern California area to continue his study of the ocean's depths.

Creation of the Lifesaving Suit have followed. So has a mastery of and the scaffold and the Sea Brakes have followed. So has a mastery of the language here.

So you look at this wiry diver and his history. You shrug. Who knows? Maybe the Andrea Doria could be raised by a gutsy little guy with a need to do it.

He says he can, but not by force. The thought is interesting and you repeat an original question-to get an original answer.

"With my teeth, my friend-my teeth."

You feel Kronhaus knows a lot about the sea he doesn't talk about. Sixty-eight ships raised might be a nice addition.

That last one is the former pride of the Italian fleet. > 1

NOTES ON RECOMPRESSION

On Saturday, 24 June 1960, 10 members of the Jax Jetty Jumpers, Inc., a diving club of Jacksonville, Florida, chartered the shrimp boat "Clancy John," out of Mayport, and proceeded to a reef about 14 miles ESE of the St. Johns River sea buoy.

One member of the club, William 0. Park, 8062 Wakefield Avenue, Jacksonville, commenced diving at about 10 a.m. and continued intermittently until about 2 am

continued intermittently until about 2 p.m. Six dives in all were made, swimming at or near the bottom in 95 feet of water. An estimated one hour was spent on these dives

After the fifth dive, Park discovered that he had lost his Rolex diving watch. He made one more dive to search for the watch and was fortunate enough to find it. He then determined that he required decompression but his air supply was exhausted. Surfacing, Park took a charged lung and descended to 20 feet for a fifteen minute decompression

After only 8 minutes at the 20 foot stop, Park was signalled to surface. It seems that sharks were bothering another member of the club about 100 yards away from the anchored shrimp boat so it was decided to move the boat in order to pick this diver up. Unfortunately, while this move was being made, the skipper of the "Clancy John slipped and fell into the hold, crushing sev eral ribs.

Since the skipper was apparently seriously injured, it was decided to return to port immediately. However, about 15 minutes after he had surfaced, Park suffered a severe pain in the right shoulder. He took a pain relieving capsule of some sort which another member of the club had on hand for relief of the pain caused by a fungus infection of the ear. Upon entering port some 2½ hours later, Park was taken by automobile to the Mayport Naval Station where a recompression chamber was presumed to be.

No recompression chamber was on hand. Arrangements were then made for a Naval or Coast Guard aircraft from Jacksonville Naval Air Station to fly Park to Charleston, South Carolina Air Force Base. An ambulance then took Park to Explosive Ordnance Disposal Unit two, an organization under the command of Commander Mine Force, U. S. Atlantic Fleet.

Treatment in the EODU-2 recompression chamber was started at 7:58 p.m., 25 June 1960 and continued until 11:52 a.m., 27 June 1960, a period of over 39 hours.

In order to get the facts before the increasing number of skin divers and possibly prevent such serious consequences in the fu-ture, the following incorrect procedures in this case are pointed out:

1. The exact and maximum depth of each dive was not recorded.

2. No buddy system was used or at least was not followed.

3. Exact bottom time was not kept in order to determine decompression required.

4. Danger of repetitive dives (6 dives in 4 hours not known or at least not respected.)

5. Location and availability of existing recompression chambers in commission not known.

6. The only boat available to tend the diver got underway to get treatment for an injured person who was probably not in such immediate need of care as the diver was in need of decompression.

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JIM JIGGER—FROGMAN is the title of the new series soon to be seen for the first time in the pages of "Skin Diver Magazine." Jim and his friends take this opportunity to bring you holiday greetings and to introduce themselves to you. Although Jim, an ex-Navy frogman, lost an eye in Korea, he is considered an expert in the diving field and his exciting adventures around the world will hold you spellbound. Assisted by his underwater buddy Gil Herring, Jim operates out of an atmospheric

little bar known as "Davy Jones' Dive" and while gallantly trying to avoid the school girl crush of young Sandy Beach, he concentrates on the amazing double life of Helen Highwaters. The underwater action and intrigue as Jim works hand in glove with Admiral Toad of Naval Intelligence will keep you on the edge of your chair in suspense. Conceived, drawn and written by competent divers Bob Cahill and Tom Reynolds, the series will be entertaining and technically correct.

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Dr. Olga Zhukova of Moscow enjoys underwater hunting on the bottom of the Black Sea. (Photo by Leonid Dorensky)



Elena Voronkova, Ex-champion of the USSR in skin diving, swimming in the Black Sea. (Photo by Leonid Darensky)

SKIN DIVING IN THE USSR

By
VICTOR BABKIN
Staff Worker
"SOVIETSKY SPORT"

A LTHOUGH skin diving was introduced in the USSR only a short time ago it has quickly gained popularity. The first underwater swimming amateur clubs and sections were set up in 1959. Among the pioneers is the Central Nautical Club in Moscow. Soon afterwards another center was established, this time at the capital's Central Writer's Club. The head of the latter section, K. Kersonsky, an author, is a keen amateur and popularizer of underwater hunting.

The author of this article is among those journalists as well as scientists, cameramen, students, factory workers and office employees who are members of the center connected with the writer's Club.

Since the foundation of our club many of us have been spending our vacations on the Black Sea coast to polish up our technique in underwater swimming, to learn everything we can about the sea and its inhabitants, and to hunt there. Some owned lungs, but the majority used masks with respirators. All of us now have lungs and trips to the sea have become more frequent, attracting larger numbers of enthusiasts.

The members of our club, like those of the other clubs, go through a course of training in theory at which we study the fundamentals of physiology and prophylactics of aquatic sports and familiarize ourselves with underwater equipment. Besides travelling to the sea, we also practice closer to home in the Moscow suburban rivers and, of course, in the Moskya river.

Underwater sport amateur clubs have been opened in many cities of the Soviet Union. The first national competition in this sport, staged in 1958 in Karabakh, Crimea, attracted challengers from Moscow, Leningrad, Sukhumi, Novorossiisk, Kiev, Riga, Baku, Ulyanovsk, Kuibyshev and many other places. The program consisted of distance and speed races in masks and with fins and in depth diving in the same masks as well as in putting number badges on each of five metal cups set at a depth of four meters and shooting at underwater targets. The athletes with lungs negotiated distances under the water following azimuth bearings and performed other exercises.

It was a rather complicated program, as one can see. Nevertheless, the competition showed that in the Soviet Union, as in other countries, there are already masters of underwater sport. Particular mention should be made of R. Stukalov, a Leningrad engineer, and Elena Voronkova, a Muscovite, who became the first USSR champions in aggregate points as well as of several other Moscovites, including E. Bashkatov, a motor mechanic, I. Sukhenko, a

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girl student, and Y. Khatskevich, a factory worker.

After the first USSR championships in Karabakh, leading skin divers took part in two more national title meets held in 1959 and in August, 1960. Both of these competitions were held in Alushta, a town situated on the Black Sea coast.

This place was not chosen accidentally. The sea bottom scenery here is beautiful and the water is clear. The main thing was that the Soviet Union's first maritime center of underwater sport was set up in Alushta in 1959. Pavilions were built here for skin divers. They can make use of equipment kept there. Boats can be rented at the center, which has experienced staff instructors.

There was very little difference in the program of events in the first and second championships. Ivan Kanunnikov, a Moscow motor mechanic, and Stasia Shaposhnikova, a swimming coach from Dniepropetrovsk, scored the greatest number of points in the men's and women's divisions respectively to become the USSR champions for 1959.

More complicated elements were introduced in the exercises this year. Whereas in the previous championship the contestants, furnished with compasses, had to pass through only five gates, placed at equal distances between one another, the distances this time were different and set up at different angles. Besides, the championship program this year included new exercises, and notably a straight-line swim in scuba over a distance of 500 meters with surfacing at a predetermined spot. The tasks were more difficult for the challengers than before, but this did not stop them from coming through all tests with flying colors.

Also noteworthy is the increase in the number of contestants. There were 100 challengers (thirteen teams) in the 1960 USSR Championships, as compared to nearly 60 skin divers (nine teams) in last year's title meet.

The current national champions are Nina Lyaschenko, a school teacher from the Ukrainian town of Dneipropetrovsk, and Borislav Lvov, a maritime club instructor from the Volga town of Saratov.

The first championships saw the contestants use the Podvodnik-I lung, the only Soviet make at that time. The Moscow Respirator Factory, which manufactures lungs, is now putting out the Podvodnik-2, a new and improved type, and also the Ukraina underwater apparatus. True, the sporting public is demanding that further improvements be made on underwater equipment and its output

expanded. That is why steps are being taken to fully meet the requirements of underwater sport devotees.

Swimming with lungs is very popular in the USSR but the popularity of swimming in masks is far greater. Whereas hundreds in the USSR set off on submarine journeys with light diving equipment, thousands go off in masks, which are cheaper more accessible, and simpler. Besides, it is possible to go hunting in masks whereas in lungs this is forbidden.

It is much easier now buying underwater swimming equipment than before. Several factories are turning out semi-masks, fins and underwater rifles. Of course hunting is not the principal aim of underwater travelers. The main thing is that excursions in the depths of lakes and seas make it possible to see many interesting things, to marvel at the secrets and wonders of maritime life. There are many such wonders under the surface of the water in the Soviet Union. The southern shore of the Crimea has fantastic cliffs and tunnels. Here one will find many curious representatives of underwater flora and fauna-seaweeds, cravfish, seashells, crabs, etc. One will come upon surprising scenes under the surface of the Black Sea off the Caucasian coast and also in the Caspian, White and Barents Seas. But probably the most thrilling sights await the underwater excursionists in the Sea of Japan. Besides amazing landscapes, one will also see a great variety of fish, crabs, octopi and other underwater inhabitants.

Many amateurs take up underwater photography in order to show others the wonders of the sea. Some of these photographers have been quite successful. A number of documentaries have been filmed in the USSR depicting the "world of silence."

A considerable number of the country's best scuba experts and divers are helping archaelogists and representatives of other branches of science in their explorations. For instance, R. Stukalov, mentioned earlier in this article, and his Leningrad colleagues took part in expeditions on lake Chudskoye and discovered structures of old Russia on its bottom.

The underwater swimming clubs and sections, with an aggregate membership currently of nearly 5,000, are united in the USSR Underwater Sport Federation, which is headed by Professor Arkady Migdal, a prominent Soviet oceangrapher and a corresponding member of the USSR Academy of Sciences.



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Challengers entering the water on the Crimean shore of the Black Sea during the USSR skin diving championships. (Photo by Leonid Dorensky)

Contestant emerging at the end of the scuba event in the USSR championships. (Photo by Leonid Dorensky)

A beginner is initiated into the world of diving in Russia. (Photo by Leonid Dorensky)







LCPR used by UDT men. Note rubber raft at stern and diver rolling into water from speeding craft. (Official Photograph U.S. Navy)

By WILL JACOBS

One underwater demolition expert rolls off speeding boat as another one prepares to follow. (Official Photograph, U.S. Navy)



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So you want to be a Navy Frogman? ... It's a lot harder than it looks; a whole lot harder.

I have just spent several days with Team 21 at the Atlantic Amphibious Base, Little Creek, Va., observing training, studying techniques, and taking movies of a typical class of trainees. My hat is off to the finest military unit in the world . . . the U. S. Navy Underwater Demolition Teams.

What is the purpose of the UDT? How does one become a frogman? Who are it's officers and instructors? How tough is the training? Well, let's start at the beginning: During World War II. the Marine Second Division suffered severe losses in the invasion of Tarawa. Waves of landing craft carrying troops, went aground on a submerged coral reef which was not rerealed by aerial reconnaisance photos. The troops were forced to wade in hip deep water over a stretch of 11/2 miles under Japanese fire. Losses were severe. This made it painfully clear that something would have to be done to find. and clear, any obstacle that lay in the path of an amphibious invasion force. This led to the forming of the Navy Combat Demolition Units composed of C.B.'s, and Navy/Marine Scouts and Raider Volunteers.

This group was gathered at Fort Pierce, Florida, in the summer of 1943, and an intensive program of physical training and demolition work was started. The first teams were sent to England and helped write history at Omaha Beach in Normandy. The survivors of this action were shipped to the Pacific to form the nucleus of the UDT.

Teams were put through an eight week basic course at Fort Pierce, Fla., and a six week advanced course at Maui, Hawaii. Their missions were standardized; usually reconnaissance on D-day minus 4, followed by demolition clearance on D minus 1, or D-day preceding H-hour. The men would usally go in towards the beach in an LCPR (a 36 foot amphibious landing craft) with a seven man rubber boat slung along it's port side. The LCPR would speed in to within 1000 yards of the beach and then turn it's starboard side to the shore and begin a run parallel to it. The swimmers would then slip over into the rubber boats, and at a signal, roll into the water to accomplish their mission. Upon completion of their work, the swimmers headed back to sea where they formed a pick-up line. The LCPR would make a run along the line, the men grabbing hold of a snare pick-up loop that swung them into the rubber boat. This then, was the work of the UDT in the Pacific. At the end of the war there were

30 teams in commission, about 3500 men.

Since World War II, the UDT has done missions, and trained, in waters throughout the world. A lot of the secrecy surrounding the teams has been lifted, so that their work is better known to all. Today the primary mission of the UDT is practically the same as during the Pacific campaign; to make reconnaissance of, and improve, the approaches to prospective landing beaches for amphibious assaults. It is therefore logical that the Navy's Underwater Demolition Teams are part of the Amphibious Forces of the Atlantic and Pacific Fleets.

There are many other capabilities of UDT. Penetration of harbors, and other waterways, for reconnaissance or demolition; sneak attacks on anchored or moored vessels; demolition of port facilities; opening of closed harbors, etc. But UDT's primary area of work is always from the three fathom line to the high water mark.

Candidates for UDT training are taken from men on active duty with the Navy who have completed basic Navy training, and have been screened for loyalty and integrity. They must be in A-1 physical condition, less than 30 years of age, have no fear of explosives, and be free from claustrophobia.

Why does one volunteer for such duty? Usually it is the spirit of adventure calling, or, the desire to work where the individual is the controlling factor of accomplishment. It certainly isn't the money or uniform. There is extra hazardous pay only when explosives are handled, and the uniform is the same as the rest of the Navy... not even a special insigna.

Team 21, the East Coast team of the Atlantic Amphibious Force is composed of about 100 men and officers under the command of Lt. Commander William H. Hamilton, Jr., U. S. N. Mr. Hamilton is a graduate of the Naval Academy, 1949, and has been associated with the UDT since serving with Team 5 on the West Coast in 1953. He also served as Executive Officer at Underwater Swimmers School at Key West, Fla. Other officers at Little Creek include LTjg Ernie Szoke, USN, Executive Officer; LTjg Bill Smith, USNR, Officer in charge of training; LTjg Norman Mimbs, USNR, Air Concept officer; LTjg Bill Myers, USNR, Submarine Concept officer; Ens. Dante Shapiro, USNR, Ass't platoon commander; and Ens. Cal Warner, USN, supervisor of Demolition instruction with the training Unit, a part of the Naval Amphibious Schools Command. There are eight enlisted instructors who are past masters in the art of harassment. From reveille



Helicopter training is one of the last phases of UDT training. (Official Photograph, U.S. Navy)

to taps, these instructors are "on" the trainees constantly. Their job is to make them tough. Nothing satisfies them and they let the trainees know it. Notes are kept on every man; his good points, his weak points, his reactions, his ability to think fast in an emergency, his desire to be a frogman.

The day's work starts at 5:30 a.m. and sometimes runs to midnight or later. Sleep is a luxury that the trainees must do without, especially during "Hell Week" when training simulates actual battle conditions. Let's take a typical day: Up at 5:30, wash, dress, and inspection by 6:00. Then a one mile run to the Physical Training area for one hour of strenuous sit-ups, pullups, push-ups, squat jumps, etc. This is a continuous workout . . . no rest periods

Then another run - the trainees never walk-to the mess hall for breakfast where they are served a hearty and plentiful meal. Again, they run to a class room for instructions on demolitions, or night problems, or infiltration techniques. After lunch, rubber rafts are loaded onto trucks for delivery to the beach area while the trainees, of course, run again. A couple of boats with instructors aboard are waiting for them. They shove off for training in dropping men into the water and then picking them up using the snare. This goes on for hours, until the trainees have it down letter perfect. The speed of the pick-up boat is increased, and training is continued at a faster pace.

(Continued on Page 40)

One second to zero. (Official Photograph, U.S. Navy)



THOMAS ANDREW SYNNOTT ...



DIVING INTO THE PAST

T was in the year 1901 that a sponge diver named Elias Stadiatis was diving for sponge at Antikythera off the island of Crete. His ship had been driven off its course in a storm and he had found shelter there from the fury of the elements.

So that their time would not be a total loss, Stadiatis decided to try his luck at diving in this unfamiliar spot. While he was diving, Stadiatis found to his amazement that an ancient Greek ship was resting on the bottom of the bay. He surmised that the Greek ship, had been caught in a storm as his own ship had, and that it, too, had been driven off its course. But the ancient ship had been less fortunate. It had foundered in the storm and with it crew and rich cargo had sunk to the bottom of the bay.

The diver discovered that the ship he had found was loaded with a rich cargo of bronzes, marble statues and

other objects of art.

But among the objects that were brought up to the surface was a strange-looking hunk of corroded bronze. The diver must have been tempted to cast the object back into the sea. Fortunately, he did not. As a result of his decision, this unlikely looking piece of metal has provided us with something that has given information about the ancient Greeks that men for over 2,000 years would never have believed possible.

Just what the strange object was puzzled scholars for almost half a century. Only recently, a British scholar named Derek de Solla Price finally identified it. "Finding a thing like this," he said, "is like finding a jet plane in

the tomb of King Tut!"

It has only been in recent years that the laborious and time-consuming task of cleaning this object had progressed far enough for scholars to examine the object thoroughly. The device, Dr. Price learned, was an astonishingly complex computer, not unlike our present-day computers. This device apparently had been made by Greek scientists for calculating the movements of the planets!

It is somewhat sobering to us to realize that the ancient Greeks, just before the collapse of their civilization, had achieved a point in science somewhat paralleling the accomplishments of our own civilization. And except for the accidental discovery of a sponge-diver we might have remained in ignorance forever of this significant fact about Greek civilization. Coincidence sometimes plays an important part in archaeology.

It is also interesting to realize what an enormously important part untrained amateur archaeologists have found in this field. In fact, many of our greatest discoveries in the history of archaeology were made by amateurs.

The father of modern archaeology was a German who became an American citizen: Heinrich Schliemann, born in 1822. As a young man his father had told him the story of ancient Troy, that great city of the Trojans which was destroyed by the Greeks. Schliemann resolved that one day he would earn a great fortune so that he could set out and find the site of the glorious city of Troy.

He worked hard and did become a very rich man. When he announced his intention of looking for Troy he received an astonishing amount of abuse from professional scholars and archaeologists throughout Europe. Didn't this ignorant merchant realize that such a place as Troy had never existed anywhere except in the mind of a great poet, Homer? But, fortified by his ignorance, Schliemann set out with only the books of Homer to guide him.

And he found Troy . . . and in it more treasure than any had ever found before.

But today, as Robert Demangel, the Director of the famous Ecole D'Athenes says, "The future of archaeology lies in the sea." Underwater archaeology, which had its beginning at Antikythera in 1901, is at about the same point that land archaeology was at one hundred years ago when the amateur Schliemann was digging at Hisserlik, the present day site of Troy.

The sea has been called "the richest museum in the world." It is a museum whose doors have hardly been opened, and with the advances made in the science of skin diving and the increasing interest being shown in it, the prospects of discoveries that are certain to be made in the sea in the future stagger the imagination.

Like Schliemann, another amateur—and an American—became interested in a legend he had read about in a magazine article. Herbert Thompson, a young civil servant in the consular service in Mexico, became interested in the mysterious civilization of the ancient Mayans. He discovered an old volume by a 16th century bishop, Diego

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de Landa, who had written about these people. The good bishop's work was ridiculed and soon forgotten. For centuries he was referred to as the "Teller of Tall Tales." But Thompson took the bishop's words seriously, and particularly his words about the sacred well of Chichen-Itzi, in Yucatan.

In the book Thompson had read that the cruel priests of the ancient Mavans used to throw beautiful young girls and prisoners and precious gems into the well to appease the wrath of the rain-god.

To satisfy his curiosity. Thompson began to take diving lessons. At last he was able to make his descent into the fetid depths of the sacred well. And Thompson proved that the bishop had been right.

He found rich treasure—greater than any found in recent history, except that found in Egypt in the famous tomb of the boy-king Tut-Ankh-Amon. The many skeletons and objects he found told him that the well had indeed been used for human sacrifice, just as Bishop de Landa had said. Thompson, unfortunately, was forced to flee from Mexico when it was learned he had found gold in the sacred well. Without a knowledge of navigation he was forced to make his escape from the country in a schooner. After a perilous thirteen day journey he landed in Cuba, but never again returned to Mexico.

Since the last war amateur skin divers have made many discoveries that have added greatly to our knowledge. Unfortunately, at this point few trained archaeologists are trained skin divers, and few skin divers are trained archaeologists. Many divers who come upon important finds can nullify the good they might have done through a lack of some knowledge of underwater archaeology. Often some things they find are so disturbed by them in their excitement that they destroy their historical value. For example, suppose you were to come across some ancient vessel, and after boarding it you see a spot where an axe had lain centuries ago. The axe, of course, has probably disappeared long ago. But even the concretion around the wood where the axe had lain would have told a trained man a great deal about the men who had sailed the ship and about their civilization. Disturbing the wreck could destroy much information that would have had enormous importance to a trained archaeologist.

Many skin divers impelled by a desire for profits are passing up great opportunities of adding to man's knowledge. Today, for example, there is a thriving black market in art objects. (In many countries, of course, all such objects found become the property of the state. To sell them is a crime.) Since the war, along the Riviera more than 100 hulks of Roman and Greek ships have been found by skin divers. The artifacts still aboard, such as amphorae, have been making divers wealthy. In Marseilles, France, they are selling amphorae for about one hundred dollars apiece. Business is brisk since these are in great demand for decorations by restaurants, bistros and private homes.

In Italy, authorities have been puzzled over the source of the great number of works of art by Etruscans that have been finding their way into the black market. (The Etruscans were people who occupy an important part in the early history of ancient Rome.) They discovered at last that divers had found a rich field of these objects in the waters off the coast of Italy and were enriching themselves by the sale of these valuable relics.

Professional looters now ply their way in the seas as they have done for countless centuries on land. Few land archaeologists entering the tombs of ancient Egyptians ever expect to find that professional looters hadn't entered there first—probably thousands of years before.

It seems strange to think of the possibility of skin divers

at work on the deserts of Egypt. That is probably what will be happening, however, before many more years have passed.

Recently the Egyptian government began construction of a great dam that will provide much needed power for that country. Unfortunately the construction of the Aswan Dam makes it necessary to flood the historic Nubian Valley where so many of the greatest temples and monuments of ancient Egypt are located. Frantic attempts are being made through the United Nations Educational, Scientific and Cultural Organization to save as many as possible before the waters close over them. But already the waters of the Nile are seeping slowly into the Valley and prospects of saving them seem dim.

Among the imposing monuments that will soon disappear is the great temple of Abu Simel, built by the conqueror Rameses II. This greatest of all rock-hewn monuments is carved completely out of the living rock of a mountain. Recently one suggestion made in all seriousness to try to save Abu Simel from the on-coming waters of the Nile was to *lift* the whole mountain high above the threatening waters! While it is believed by engineers that it could be done, they feel it would be tremendously expensive and that the temple might be destroyed in the process.

So, the waters will soon close forever over the huge figure of Re-Harakhti, the Egyptian sun-god, who, in a niche high above the portals of the temple of Abu Simel, has peered out over the desert for over thirty-five centuries. From that time on all archaeological exploration in the Nubian Valley will be done by skin divers only.

In the ranks of today's young skin divers are the Schliemanns and the Thompsons of tomorrow. Like these men they are learning as much about the field of archaeology as they can. Some who never dreamed they could be haunting libraries looking for ancient and almost forgotten volumes are doing so becase of the interest they have gained as a result of discoveries of their own made in their diving. Many are studying old volumes carefully for that spark of truth that lies hidden in all the legends that have passed down through the ages. The spark which might give them all-important clues such as blind Homer had given Heinrick Schliemann and a teller of tall tales had given Herbert Thompson.

Among those tales being examined closely today are those telling of great cities which were swallowed up by the angry sea. In many lands you will still hear people repeating in wondrous tones the legends about the sea that have been passed down to them. These are the subject of study by the underwater archaeologist who knows well that the sea has many times in the past, and will again many times in the future devour great cities with their inhabitants and their treasures.

They examine carefully such stories as that of an ancient city of Vineta, for example. Vineta, the ancients believed, was swallowed up by the sea many centuries ago. At certain times, it was said, the spectral city would rise up out of the sea. Often an ill-fated ship would lose its way and be destroyed on the sunken church steeples of the city. Then it would vanish without a single survivor. The people would whisper that the people who lived in the underwater city would rise up to carry off the crew members of the stricken ship to their city at the bottom of the sea. They say you can still hear the mournful sound of the church bells in that sunken city tolling for the doomed sailors.

And it will be through the work of other young men following dreams and working in the richest museum in the world, that our knowledge of man's past will be enlarged enormously and we will come to learn more about the long, mysterious and wonderful past of man.

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IN THE past fifteen years since World War II ended, sports have made a steady comeback into the limelight. Many sports have grown, while new ones have sprung into existence. No sport or hobby has made such a meteoric rise into popularity as skin diving.

Although man has been diving since early times, it was Jacques Cousteau who opened up the field with the development of the "Aqua-Lung." Since then, thousands have discovered the fantastically exciting underwater world where everything is shadows, silence and beauty. Once a person has been afflicted with diving fever all other forms of recreation seem dull in comparison.

I got my first taste of diving in Florida while in college. One day a friend took me out in his boat, loaned me some basic equipment and showed me the most beautiful sights I had ever seen, along a shallow reef off Key Largo. From that moment on I was an ardent enthusiast, and spent every minute of my spare time diving or puttering with my equipment, which, at that time, consisted of a mask, snorkel, flip-

pers and a rusty knife, plus a homemade Hawaiian sling, a sort of crude sling shot propelling a light spear.

It wasn't until the following summer, however, when I was back home in Rhode Island, that I decided to try to make diving pay off without any large outlay of capital. This happened one day while my buddy and future partner, Dave Long, and I were sitting on the beach trying to think of a good way to make money during our summer vacations. As we sat there watching the commercial fishermen working their long heavy rakes from small skiffs, to get the hard shelled clams so abundant in Narragansett Bay ,the ideal plan occurred to me. If those fishermen could make twenty-five to fifty dollars a day raking up those clams, why couldn't we, sitting on the bottom with lungs, pick them up twice as fast? The more we thought about it the better the idea seemed, especially since I had had some diving experience in Florida.

It was too late in the season to start anything that summer, but I went back to college that fall full of plans for the following summer. During the winter

I haunted the diving equipment shops and surplus stores until I had acquired. at an approximate cost of \$150, a small gasoline-powered paint spray air compressor which was light enough to be carried about. I also had 50 feet of hose connected to this at one end, and the other end connected to a mask. The mask covered the entire face, and the hose was connected to the right side of it. While the compressor was in operation it pumped a steady flow of air through the hose into the mask. The speed of the engine was regulated to the amount of air needed by the person using the mask. The surplus air not inhaled, escaped from the other side of the mask through a one way valve. With this rig I returned to Rhode Island and Dave Long in early June.

Our impatience to begin our moneymaking operations was impeded by our lack of a rubber suit, for at this time of year the water temperature in Narragansett Bay was about 50°. It didn't take us long, though, to track down and buy a full length rubber suit, and the very next morning we started out in Dave's father's boat, an inboard runabout. It was understood that we would

I MADE MY HOBBY

PAY OFF

By Lt. A. MICHAEL LEECH, USCG

AUTHOR'S 18 FOOT LYMAN

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SKIN DIVER-December 1960

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Dave Long (left) and author talk over a prob-

buy our own work boat as soon as we had earned enough for it.

Needless to say our revolutionary plan to get rich quickly had met with some skepticism as news of the plan spread among the hardworking commercial fishermen, so, on our first morning out there were several of them who anchored near us to see what results we would have.

The morning was cloudy and windy and the thermometer stood at a grim 49°, when we left the dock that morning, but our spirits were high. Since I had had the only experience at diving I was the first to go down, while Dave stood by in the boat, tending lines and keeping an eye on the compressor engine. I stripped down to my long johns which I had put on for the occasion, put on a pair of heavy socks, and pulled on an additional heavy sweater. Then I climbed into the rubber suit and donned my flippers, gloves and the diving mask. Picking up the basket in one hand I was ready to go-or so I thought. Thinking to myself "Here goes nothing," and with the necks of the spectators craning, I rolled off into the water.

What happened next is hard to put into words. As I hit the water, my feet sank and the air, trapped in the suit rus'ied upward, ballooning out the suit from the waist up, and there I bobbed like a comic figure of a deep sea diver, my arms outstretched and suit swollen. After a great deal of awkward struggling I managed to get most of the air out of the suit, but it was still almost impossible to stay underwater, so completely chagrinned and mortified, and to the glee of my audience, I returned to the boat and we went home.

However, we still had high hopes which were not to be dampened by a minor incident like the one experienced earlier in the day, and within a few hours of returning to shore, we had acquired two 10 pound weight belts and rigged them. We now felt that the next day would not only revolutionize the shellfish industry, but would make us both not only solvent again but shellfish magnates besides.

Next morning the weather was ideal. The Bay was calm, the sun bright and warm, but nothing compared to our spirits.

Again we anchored, and I put on the equipment. This time lowering myself slowly into the water and letting the trapped air out of my suit, I settled nicely on the bottom, twenty feet down.

The Rhode Island Narragansett Bay water on a clear day has a visability of about three or four feet, but as I settled on the bottom I stirred up a cloud of mud that reduced the visability to absolute zero. Not to be outdone by the elements however, I bravely began to work in the inky blackness. In a matter of minutes my gloves had been cut to shreds on the sharp shells. After ten minutes I was chilled to the bone and water was seeping slowly into my suit through the openings at my face and hands. Worst of all, instead of the handsful of shellfish I had expected to be scooping into my basket, there was a pitifully small fill. I was defeated.

Back on shore that afternoon there were never two more dejected human beings in the world than my partner and I. Our plan had fallen through, and we had no other ideas of employment. Not only that, we were stuck with \$200 worth of used diving equipment. It was then a new idea occurred to Dave.

"Look," he said, "so we can't make any money picking clams. So what? There are other ways to make money diving!" I didn't believe it at the time, but he was never more right in his life.

Since the hurricanes Carol and Edna had swept through Rhode Island the previous fall, his idea was to dive in the crowded yacht anchorages and attempt to recover the moorings from which many boats had broken loose during these two storms. I dismissed this idea at once thinking the visability would be too poor. It would mean one would literally almost have to bump into one before seeing it. But, in the long run, since we had nothing to lose, I agreed to try it.

The rest of the day we paid a visit to the local boat yard owner who handled all the moorings for the yacht owners. He informed us we were crazy, but if we wanted to go diving around in the cold dirty water, why sure, he'd pay us \$15 for each mooring we found. At the time, even \$15 looked like a lot of money to us and we began to cheer up a little for the first time in several days.

On the next good day, in a borowed skiff we set out into the harbor, dropped anchor in the most crowded spot, and I prepared to go down and have a look around.

Once in the water again, I was surprised to find the visability much better than I had expected. Because of the sandy bottom which seemed to reflect light coming from the bright sunlight fifteen feet above, I could make out shadowy objects eight or nine feet away. Those who have done some diving know what an eerie feeling one can get while diving in an unexplored new place when the light is dim and surroundings unfamiliar. This was certainly an unexplored place because few people in the area at the time had lungs, and those who did used them at the ocean beaches and coves, where the water was clear and fish abundant, not in murky Narragansett Bay. Here, spider crabs reared up at the sight of me, swinging their oversized claws as if to spar with me, while eels slithered out of their hiding places beside rock crevices; and seaweed, like pieces of green waxed paper drifted by in the current, often brushing against my hands or face and thereby startling me.

The current at its maximum can be a fearsome, overpowering thing, but a weak current is always an aid to a diver. With it he can always tell which way he is headed. Today I had such a current to help me, so mustering all my determination I started out in quest of treasure in the form of rusty mooring blocks. I found one almost immediately!

There, half muried in the muddy sand was the outline of a large seagrowth-encrusted iron wheel. These I knew are often used as moorings, so groping around I discovered a heavy chain leading from it into the direction of the current. Digging it up from under an inch of silt as I went, I followed it to its end, then bobbed to the surface to signal to Dave for a marker I could secure to the end of the chain. Then down I went again, and ten minutes later I had found another. After properly marking this one, I returned to board the skiff, excited but beginning to get chilled. We had made \$30 for less than half hour's work. We decided to call it a day.

The next day was again bright and sunny, and the good fortune of the day before was repeated, except today we found *three* moorings, plus a small anchor and a bilge pump lost overboard by some slippery fingered boatman. We were on our way, and in the meantime, people along the waterfront were beginning to sit up and take notice of our activities.

As the days passed and our hauls began to mount up, men began asking us if we would take 'a look around' for their mooring lost in such and such a place; or for a ring some man's wife had lost overboard the week before; or



Long in boat and Leech on raft preparing to raise engine from sunken yacht. Same raft was used to raise 18 foot Lyman.

a lost outboard motor. It was amazing the amount and variety of items large and small lost in that small harbor. Of course we were more than glad to look for them—at \$15 an hour. In all the cases of looking for a lost article, there were only one or two cases where the location was indefinite and we were unable to come up with any results.

Sometimes while looking for one thing, we would run across another; such as anchors of all sizes from two pounds grappling to five hundred pound mushroom anchors, bilge pumps, tackle boxes, rods, reels, cigarette lighters, glasses by the dozen, silverware, all kinds of tools (mostly accumulated around the ends of piers where boats tled up), as well as an amazing assortment of hooks, lines and sinkers, not to mention the varied pieces of hardware from chains to metal boarding ladders. We even found a case of soda, one day. Nearly all of this bounty could be sold at a profit. Up to this time though we had found nothing worth more than around \$50. This was soon to change.

One day while diving under a bridge in almost absolute blackness at thirty feet, a dark shape loomed up in front of me. I circled it and saw something gleam. I took a closer look, and to my joy discovered the object was half of a fibre glass runabout with an outboard still fastened to the stern. It had apparently hit the bridge during one of the hurricanes the previous fall, broken in half and been resting in its murky grave ever since. We were able to haul it up, rebuild it and sell it at a handsome profit. The next week, diving near the same spot I came across the hull of a 35 foot yacht, sunk between the same bridge and railroad trestle. The transom, bow and pilot house were gone, but there resting in the keel was the engine, and by the control board dials I could tell it had been run less than forty hours before it went to its doom in the hurricane.

This was too much to fool with without advice, so we saw a lawyer who advised us to secure salvage rights before doing anything. The first step was to find out who the craft had belonged to, which wasn't hard. The local boat yard owner knew whose boat it had to be, but when we contacted the owner, he informed us the insurance company had paid his claim of loss, so theoretically they owned it, even though they didn't have the slightest idea where it was. We sent them an offer of \$25 for salvage rights, and received acceptance by return mail.

Since the hull was lying right side up on the bottom, all we had to do was unbolt the engine, saw through the shaft and hoist the motor to the surface. This was done in less than an hour by borrowing the boat yard's float which was used to haul up moorings. We attached a chain to the engine and pulled it to the surface by chainfall. A mechanic met us on shore to take the engine to be completely overhauled and a new electrical system installed. Total cost of rejuvenation was \$150 and before it even was ready we received a top offer of \$450 for the engine. This bit of good luck alone had more than paid for all our equipment, but our best luck was vet to come.

It happened one day while I was looking for a lost mooring in a crowded anchorage. As I moved slowly along the bottom I came to what I at first thought was a ledge, but upon closer scrutiny discovered it to be the side of a small boat. I circled around the stern and noted the name was still clearly discernable. I swam around and inspected the other side, but to my surprise could find no hole or other apparent damage. As I moved up and across the bow I saw that half the windshield was smashed, and inside the cockpit the engine box was missing, revealing a rather new looking 45 horsepower Graymarine engine. The control panel showed the engine had been used only 32 hours. There was no other visible damage except for a few scars and barnacles.

Back on the surface I related my find to Dave, and we immediately went ashore to find out more about the boat. Upon hearing the name of it, the boat yard owner recalled its being swamped under a dock during hurricane Carol. There it remained for a week, when huricane Edna came along and the boat had been missing ever since—until we found it in less than fifteen feet of water, one hundred feet from shore. We learned it was an 18 foot Lyman that was one year old when lost, and we also found out the name of the owner.

Once again the owner informed us that the insurance company now owned the boat after having paid off his claim for total loss, and though they didn't know where the boat was lost, they did control all rights to it. Again our offer of \$25 for salvage rights was accepted. This time after going through some dickering and red tape, and consultations with an insurance adjuster who tried to pry out of us the exact location of the boat, we finally received clearance.

The next Sunday we once again borrowed the boat vard's float, hooked a chain up fore-and-aft to the sunken boat, and with a crowd on the shore watching, commenced hauling up the boat. As the gunwale broke the surface, we started to bail out the water, mud. seaweed, crabs and fish until the boat was floating high in the water, the engine having already been hauled out to be rebuilt, as in the previous operation. After that it was an easy matter to float it onto a trailer and take it to Dave's backyard, where the tedious job of taking the boat down to bare wood and refinishing and painting it was to be undertaken. The total cost of getting the boat, which had been underwater for a year, back in good running shape was estimated at \$300. Doing most of the work ourselves, we sold it for \$1450.

That was our best find of the summer, but by this time we were well known along the waterfront, and we were getting quite a few jobs inspecting and putting new chains on moorings and recovering lost articles. By contacting yacht club commodores, boat yard managers and bait and tackle store owners we got leads on much additional work. While we weren't working for somebody, we were diving independently for anything we could find, which included many moorings as well as two more sunken yachts.

One of the yachts was so far smashed that the only salvagable part left was the brass propeller and shaft, but the owner, a sentimental old gentleman gave us a reward for discovering the hulk. The other craft was also badly damaged with engine unsalvagable, but many of the accessories and fittings were still in good shape and worth money.

Although the bulk of our profits were in finding the boats sunk in the hurricanes, we still would have shown a good profit without there having been any storm salvage at all. This was proved in the years since our first summer of diving, when, with different jobs and working on weekends it is still possible to pick up extra cash while doing a diving job for some yachtsman who wants this keel cleared of sea growth without hauling the boat out, or replacing that mooring chain. What's more, with me it has become a hobby now that I can make it pay for itself and then some, meet interesting people, and satisfy the desire to dive in new

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UNDERWATER SOCIETY OF AMERICA

JOHN J. McANIFF

Director of Publicity,
Underwater Society of America
P. O. Box 724, Station A
Champaign, Illinois

In the spirit of the season the Officers and Board of Governors of the Society extend to our many brothers and sisters of the underwater world the most sincere wish for a joyous Christmas and a safe and prosperous New Year.

This end of the year report will indicate that great strides have been made in the progress of both the Underwater Society of America and all phases of interest in the world beneath the waves. The recently appointed special assistant to our President Carl is launching on a program which will take him to nearly all parts of the country with plans to improve the financial base of the organization. Mr. Jay Albeanese from New Orleans, Louisiana, has literally taken the bull by the horns and is carrying his program personnally to each of the Councils in the Society. Every Council will be contacted by Jay well in advance of his arrival time and the fullest possible cooperation is urged of all Councils and their membership to help him with this program to build the very background of the Society.

As a full and recognized member of the National Safety Council, the Society will present its views on underwater safety at the forthcoming meeting of this organization in Chicago. Director of Safety Ben Davis will represent the Society and is expected to note the excellent safety record on underwater activities that has been set in the past few years. In spite of the general public impression of the grave dangers involved in undersea activities, an outstanding record of safety has been established through the combined efforts of the Society and its member Councils.

The tremendous growth of interest in the liquid world is quite aptly indicated by the sudden rush of new television programs which claim the underseas as their background. No less than six new nationally televised programs are now available through the miracle of your TV screen. Most of these are fine productions and all are adhering to continuous caution regarding the safety aspects of underwater activities though the experienced diver is quick to note obvious errors in the technical aspects of the various plots.

The well known TV hero of Sea Hunt, Lloyd Bridges, has teamed with west coast author-diver, Bill Barada to write a brand new book with the interesting title of "Mask and Flippers." In this book the authors pay glowing tribute to the Underwater Society of America and its member Councils for their contribution to the betterment and safety of skin diving and also cite such others as the late Conrad Limbaugh, Gustav Dalla Valle and "Skin Diver Magazine."

The Society is at present in the progress of contacting the many organizations concerned with the technical aspects of underwater activity with a view toward an increase of interests in such fields as marine

archaeology, marine biology, photography, sub-aquatic agriculture, geology and many others. The Society believes that the compilation of extensive information in these various fields of endeavour and its subsequent dissemination to interested parties will be a tremendous aid to all interested in these fields and certainly should do much to encourage such activities.

To those readers who fancy themselves as historians or collectors the Society can still offer a considerable number of copies of the Souvenir Program Book of the First Annual Underwater Society of America Convention held this past summer at Houston, Texas. Also still available, but on a first come, first served basis, are a limited number of Souvenir albums containing tenselected photos depicting the highlights of the Convention. The Souvenir Program book is available by mail to all for \$1.10 and the Souvenir Album at \$6.50. Please send check or money order to Society headquarters for your copy of either.

Membership increases and the demand for patches is keeping such a fast pace that the paperwork on both is about four weeks behind. Again we urge your patience if you do not hear immediately from your correspondence.

From our Vice-President for Competitive Spearfishing, John Geiszler reports that his committee is in full operation and for the first time since the incepton of the sport complete harmony and cooperation is evident throughout the country. The 1961 competitive season promises to be the greatest yet. Location for the '61 Nationals will be established shortly and those areas interested in sponsoring same are urged to write direct to John c/o Society headquarters for complete bidding information.

Don Marchese of the Empire State Council is working closely with Director of Safety Ben Davis in a program of research into all types of diving accidents and has distributed an accident report form to all Councils with a request that each accident in the past five years be listed with as complete a report of the details as possible.

Miss Mel Lillis, Inter Council Coordinator for the Society also supervises the Society's information service and reports that her office is literally swamped with requests for information of all kinds. Such questions as "How deep can I dive with a snorkel?" are indicative of the need for this service of the Society. Those who have written to Mel are asked to be patient and their answers will be forthcoming as soon as possible.

With a new diving year all but upon us the Society suggests you continue to exercise the type of caution which has kept this field of underwater activity safe and sane during the past few years. Use your Divers Flag and urge your friends to do so, too.

TRICKS OF THE

By RICHARD AMBROSE

There are many sources of written instructional material on skin and scuba diving. Most of them discuss diving equipment, diving diseases, the properties of gases, and so on. While it is necessary to know this material well to insure safe diving, one should also become acquanted with certain "tricks of the trade."

The following suggestions, though not mentioned frequently in diving books, are

The following suggestions, though not mentioned frequently in diving books, are known widely among experienced divers. Perhaps many of the procedures described will be familiar to you perhaps not. It is hoped that they will be of some help in improving your snorkel and scuba diving techniques.

1. For ease in putting on swim fins, first wet the fins then easily slip them on.

2. When surface swimming with a snorkel try to keep your feet under the water. Rember, swim fins were designed to provide propulsion under the water, not above.

To make a fast vertical dive straight to the bottom, descend rapidly, turning in a screw-like manner.

4. Wet suits should be left to dry in the inside-out position. In this way the air has free access to all surfaces both inside and outside the suit to promote quick drying.

5. If you have trouble with ear clearing, hold the mask tightly against the face and gently blow through the nose before pressure is felt on the ears. By doing this several times during descent, equalization will be achieved easier and with less discomfort.

6. The best method for a fully equipped scuba diver to enter the water from a small boat is to sit along the side of the boat and fall in backwards. In this manner the air tanks breaks the water first, not the diver.

7. When entering the water from a beach, etc., it is a good idea to walk backwards. This way the swim fins offer the least possible water resistance.

8. Standing up in shallow water without "tripping on your fins" can best be accomplished by going from snorkeling position to standing position with a half turn backwards.

9. When surfacing with scuba, stop your ascent a few feet from the surface. Hold your breath and listen. If there are any boats in the area the sound of their motors will become apparent and surfacing should be halted until the area is clear.

10. When "buddy breathing" it is not necessary to insert the regulator mouthpiece entirely into the mouth. It is less time consuming (an important factor when one air supply has to be shared) to hold the mouthpiece so that the lips do not close over the ridge. This can be aided by holding the mouthpiece against the lips with one hand.

Navy Diving Manual Available Again

The Navy Department has released its revised edition of the U.S. Navy Diving Manual. This excellent manual presents all the technical information currently available and is an invaluable aid to all divers.

The Manual can be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. The price is \$3.25

SPEARFISHERMEN THREATENED BY DEPARTMENT OF FISH AND GAME **PROPOSALS**

"Prohibit Underwater Spearfishing In All "Prohibit Underwater Inland Waters." Spearfishing For Black Sea Bass.

These two proposals are included in the California Dept. of Fish & Game's recommendations to the Fish & Game Commission for 1961 angling regulation changes, and once again California divers are facing a fight to retain their hard-won spearfish-

ing rights.

The Conference of California Councils, composed of the San Diego, Greater Los Angeles, and Central California Diving Councils, is spearheading the battle, with full assistance from the Underwater Society of America. The Conference was represented at the last Fish & Game Commission meeting by Oscar Asturias, President of the Cen-Cal Council, who presented organized diving's preliminary arguments against the new restrictions. There will be one more public hearing in Los Angeles on December 9, when the Commission will hear final pleas on proposed regulations. Representatives from all three California councils will appear at that meeting.

In the matter of the black sea bass, the of Fish & Game claimed that "A handful of underwater spearfishermen is endangering the rather scarce giant sea bass. These trophy hunters have killed and wounded many of these enormous fish needlessly in the few places where they may still be found. The fish are extremely slow grow-ing and the resource can be destroyed

In his rebuttal, Asturias stressed the fact that Fish & Game has produced no evidence that their recommendation was based on any actual survey, but was merely a matter of opinion. He pointed out that skin diving receives an undue amount of publicity and that the sight of a diver coming ashore on a public beach with a giant bass would attract more attention than a dozen such fish being weighed in at a charter boat dock.

He said that Conference clubs would bow to no one when it came to conservation and sportsmanship. If they could be shown that the black sea bass was actually in danger of extinction, they would be the first to lend full support to any fair measures taken to alleviate the situation. He insisted, however, that any species in danger of extinction should be protected from all its human enemies. not just spearfishermen.

The Department, to date, has produced no evidence of any scientific survey or research program to back their claims. The recommendation seems based on opinion rather than information. Possibly they will present facts and figures at the December hearings. If they do show that the giant fish

are in danger they will find all three California councils squarely behind their ef-forts—as long as the prohibition extends to everyone—line fishermen, and commercial netters, as well as spearfishermen. The battle to legalize inland, or fresh

water spearfishing in California has been a long one, even when the only "privilege" ever asked was the spearing of trash fish. Last year's regulations allowed short seasons, ranging from six days to three months in six locations in the State. The concession was dubbed an "experiment" by the Dept. of Fish & Game. It was the result of five years of effort by the Fresno Skin Divers and some diligent ground work by the Mc-Clellan Aqua Knights. The Central Cali-fornia Council assisted by getting a "do pass" recommendation from the large and powerful Associated Sportsmen of Cali-

Because this was plainly labeled experimental and because of the implications that any abuse of the new privileges would mean an end to the program, organized diving took a very gingerly approach to the matter. Divers were warned to stay away if they were not fully familiar with the areas involved and the species of fish which could, or could not, be taken. The Cen-Cal Bulletin, sent to all clubs from Bakersfield to the Oregon border, twice asked all divers to wait for supervised fishing meets, so that the experiment would not be jeopardized by people who might unknowingly violate some provision of the fish and game laws.

Because of an understandable desire to have everything go safely and smoothly, giving the authorities no incident or accident as an excuse to halt the program, the local clubs sponsoring the organized meets imposed restrictions over and above those demanded in ocean competition. There were swimming tests, fish identification tests, diving gear modifications, and impoundment of spear guns. Because of these restraints a good many ocean divers avoided the meets. Even then, over 150 divers participated in a competition on the American River. Sponsored by the McClellan Aqua Knights, the affair was well organized and ran smoothly with no violations reported.

Considering the season a success, local clubs prepared lists of enlarged areas and longer seasons for the 1961 regulations.

They were in for a surprise.

The 1961 proposals from the Department included "Recommendation—prohibit un-derwater spearfishing in all inland waters." The reason? "An experimental regulation permitted underwater spearfishing in six waters during 1960. Few people fished and few fish were caught. The impact on rough fish was negligible. Benefits are too small and limited to too few individuals to justify the resulting conflict and necessary surveil.

Oscar Asturias told the above story to the Commission—how the divers had held back until they found out just what the Fish & Game people expected in this "experiment," then, ironically, discovered that what they had evidently wanted was mass participation.

He also took exception to the phrase "necessary surveillance," saying that divers resented and rejected the implication that skin divers require special surveillance. It might be mentioned here that California bow and arrow hunters may shoot carp without any special restrictions or surveillance

whatsoever.

We believe the principal point to be made here is the fact that this is a sportsman's re-source going to waste. The rough fish are admittedly useless and a nuisance. If the Fish & Game people could eliminate them they would. Since they are of no value, what sound reason can there be for these restrictions? We think that one of the restrictions? answers lies in the attitude of some of the older Department officials, to whom the man with the spear is the man who poaches game fish. For many years in California it was an offense to be found in possession of a spear within a quarter-mile of a fishing

There is much to be done in the short interval between the two hearings. The Un-derwater Society of America has been approached to coordinate the gathering of statistics and will cooperate fully. A documented case must be prepared for presentation to the Commission. There are two exhibits which we think will impress them and we can use help in preparing both.

First, an effort is being made to gather

information on rough fish spearing regula-tions in all the states. If any reader has received a questionnaire on this matter and has not yet returned it, please do so at once. Once this information is gathered and tabulated it will be turned over to the Under-water Society for the use of other councils with similar problems.

Second, we want every club in California including coastal clubs, affiliated or not, to send a letter to the Conference of California Councils, stating that they are in favor of a 1961 fresh water rough fish season and that they will participate in such a season. If we are able to present the Commission with a hundred or more such letters we know they will be impressed.

Letters and questionnaires should be sent to the Secretary, Central California Diving Council, 338 Beach Road, Alameda, California, or to Marlene Strawn, Cen-Cal Publicity Director, whose address appears above her monthly column in this magazine.

There are a great many divers living in California to whom a trip to the coast means traveling one to three hundred miles. The inland season means a great deal to them. But more important, the passage of this proposal, or the black sea bass proposition, is another ratification of the principle that skin divers are a minority group who require extra restrictions and "special sur-

It is also hoped that this struggle, win, lose, or draw, will answer the question, "Why should I, or my club, or my council, affiliate with the organization?" Here is a threat to all California spearfishermen that only a state-wide organization can effectively cope with, and even that body turns to the national society for assistance. trouble with being an individualist is that, though free to snicker at the organizations in times of tranqulity, you can only whim-per when hurt. And whimpering wins neither respect nor results.

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For weeks the intrepid Triton Diving Club of Toledo had been planning to raise an abandoned automobile from nearby Whitehouse Quarry. Finally the big day came. All preparations were made, fifty gallon drum floats were in position, only darkness held back the final effort. With the rising sun, and before many expected onlookers, the deed would be accomplished. But in the gentle, hiding darkness of night, a rival group steathily crept in, floated the car, beached it and left the following sign. "If you want it any higher, use helium . . ." What did the Tritons do? They re-sank it, of course, so that they could re-float it for their waiting audience.



SEA ROVERS

By JERRY OCEL A/2C

THERE ARE many skin divers in the armed forces who read SDM regularly.

There are quite a few who have put in a tour in Japan and there are many more who will be on their way here in the near future. Those that have been here know of the excellent diving conditions that exist here in Japan. For those who will be coming here soon I would like to relate some of the highlights of our last diving trip to aquaint them with the thrills they will encounter while diving in Japan.

At 0830 on the 5th of March we boarded a coastal transport to go to Iki-Shima, an island which lies about 40 miles out in the Korean straits from the port of Fukoka. After a four hour boat trip we docked at the fishing village of Katsumoto on Iki-Shima. By the time we walked from the docks to the west end of the village there were about 75 curious onlookers following us. When we set up a camp about a mile from the village and changed into our wet suits all those who followed us were wide-eyed with wonder. I think it must have been the first time they had ever seen any skin diver with all their strange gear.

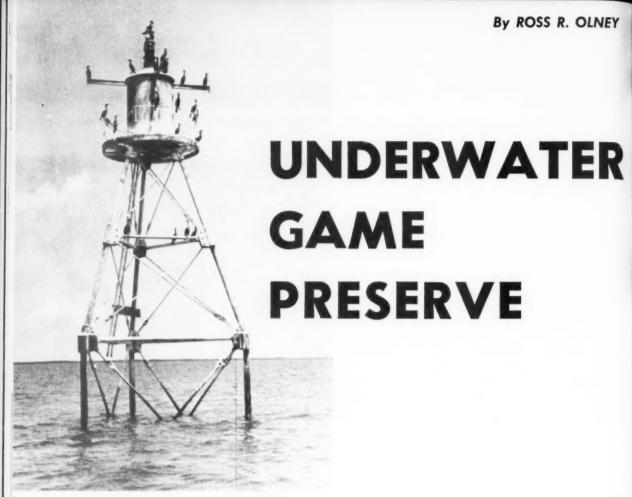
We spent about three hours in water from 60 to 70 feet deep with a visibility of about 60 feet. We didn't see any good size fish but as we found out later from a Japanese fisherman that all the big fish move to deeper water during the winter months but start coming back in during February. It is possible to rent a Japanese fishing boat for all day long for 1800 yen (\$5.00) but due to our limited time on this first trip there we were satisfied to dive from the beach, although next time we plan to hire a fishing boat and try out some of the smaller islands around Iki-Shima.

We had to leave Iki-Shima, much to our regret, early Sunday. When we got back to Fukoka one of the guys realized that he had forgotten his weight belt on Iki-Shima, and was feeling rather forlorn about his loss, but much to our surprise early Monday morning he got a call from the Air Police and they told him that they received a call from the police on Iki-Shima that they had found his weight belt and that they would send it to him as soon as possible. None of us can figure out how the Japanese police ever found out who the belt belonged to since there was no identification on it and no one on the island knew us by name.

The five of us who took the trip, Bob Mello from Massachusetts, Herbert Kennedy from Florida, Bob Beske from Germany, Art Hunt from Florida, and myself (Jerry Ocel) from Minnesota, all agree that the water is clearer than you can find in the states and the people are real friendly and the best part is you don't have to spend much money traveling. Our whole trip cost us 700 yen (\$1.94) apiece which isn't bad for a two day outing.

I only hope that any diver coming to Japan or that those who are already here will enjoy the diving here as much as we do.

Any interested persons who might be coming to this area are invited to contact our club for any information pertaining to this area at the following address: Itazuke Sea Rovers, c/oA/2C Jerry Ocel, 68th Fighter Interceptor Squadron, Box 131, APO 929, San Francisco, California.



Lonely tower is only indication of government protected, flourishing marine world below. (Sea Frontiers)

Once again spearfishing has been outlawed in an area open to ordinary angling. In a sense, perhaps this is good since the area in question is one of the most beautiful coral formations in the world and a perfect gathering and breeding ground for undersea creatures. The taking of fish, particularly since the Key Largo Coral Reef Preserve was recently proclaimed a state and national park, doesn't seem right regardless of method.

So, why allow line fishermen in a natural preserve? Is the preserve set aside for breeding, along with its natural beauty, or not? It is common knowledge that line fishermen take and injure, perhaps unknown to them at the time, far smaller and more delicate fish than any spearfishing skin diver would even consider. Since he's there where he can see them, he passes them by for bigger game. The angler, unseeing in his boat, has no idea of the size of the mouth his hook has pene-

Time and again the "wanton slaughter" charge hurled at underwater hunters has been proved untrue. Competitions, if nothing else, have proved this with ever increasing size limits and decreasing species and bag limits. By the same token, what does the average line fisherman do if his bait has been taken and swallowed by some young "junior sized" member of the game he is seeking.

What can he do?

He removed the hook as best he can. returns the fish to the water to die, and resumes his battle of wits with the big

The area in question, located a short distance off Key Largo in Florida, was proclaimed a national park by President Eisenhower on March 15, 1960. And the idea behind the action is good. The living coral reef was gradually being destroyed by over enthusiastic coral and shell collectors, commercial fishermen, blasting and dredging operations and the like. In 1957 a biological conference was held, their main concern being the preservation of the natural resources of south Florida. At this

meeting, after overcoming the hurdles of state and federal off-shore ownership, it was decided the area should be made the world's first completely underwater park. A quick telegram to Washington turned the trick.

Extending for approximately 21 miles, the area is about four miles wide and is dedicated to the undisturbed growth of the reef and the preservation of surrounding marine life. It provides a breeding and nursery ground for reef life that will benefit all the surrounding reefs from Fowey Rock to Key West. Its natural beauty and abundance of marine life is rivaled only by the Great Barirer Reef.

Why then allow the taking of ANY fish from this protected area? Divers have long favored the establishment of underwater preserves. For photography, for the gathering of scientific data, such an area is unexcelled.

The Key Largo Coral Reef Preserve is a perfect example. With water so clear the diver feels he is floating weightless in pale green air, the reef is

heautifu massive purple s setting a profusio angels, g sergeant of other among tected i The bul tects the conch.

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further sparse e consider on the s were ver West

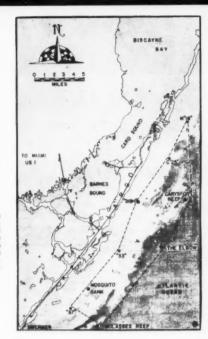
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Graceful angel fish, several species of which live in Key Largo Preserve, hovers over a large star coral. (Photo by Edmond L. Fisher)

Dotted lines indicate the portion of the only living coral reef on North America which has been set aside as a game preserve. (Map by Richard R. Marra)



beautifully covered with tree coral and massive brain coral with their waving purple sea feathers and fans. In this setting are slowly swimming a dazzling profusion of queen triggers, French angels, green parrot fish, surgeon fish, sergeant-majors, bar-jacks and a host of others. Grouper and snapper live among the coral. Sheltered and protected is the southern spiny lobster. The bulwark-like line of the reef protects the grass flats, home of the queen conch.

This is an area into which underwater life can gather, sheltered and protected, to reproduce and re-populate other reefs. This is an area that should remain untouched by ALL hunters, divers and fishermen alike.

Glass bottomed boats can cruise slowly over with passengers awed at the myriad of color below, camera equipped divers can move serenely among the coral and marine life...

But should the area be open to the taking of random fish with a line and

closed to the taking of larger, more plentiful species with a spear?

The area, by its very name, is a preserve. The *only* thing removed from this place of natural beauty should be photographs and fond memories of the undisturbed beauty of our ocean floor.

To close the area to one hunter, and expose the inhabitants to another, does not seem just. This is discrimination and on a national level.

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(Continued from Page 11)

further back into the tunnel it became sparse except for dead barnacles and a considerable amount of hydroid growth on the sides and top of the pipe. There were very few fish except near the end.

We stopped periodically, taking photographs and collecting biological and geological samples. I kept busy snapping pictures trying not to let my mind wander. Glancing at my watch about every three minutes the time dragged on. Ten—fifteen—twenty—thirty—thirty-five minutes had passed. In only 25 minutes more they would reverse the current. If we didn't make the end in time it would be rough.

It always seemed as if we should see daylight at the end of the next section of pipe, but it never came. Soon we started quickening our pace. The most grueling thing about it was that we did not know whether the end was near or whether it was still far away.

A few good signs started to show. A greater concentration of fish . . . then

we could see a faint glow. I turned off my light to make sure that it was not just a reflection off the particles in the water. The glow became brighter, almost majestic in appearance. Suddenly, silhouetted against the light, we saw the complicated maze of baffles and huge butterfly valve that we were to worm our way through. This was already familiar to us, for the day before we had swum 500 feet up the tunnel against the current to familiarize ourselves with the passage.

We dodged the huge butterfly valve and went sailing into the settling basin swimming strongly sideways to get out of the current that could have pinned us up against the straining bars. Checking the corners of the settlement basin we found hiding small halibut and turbots which scurried off as we neared. There was about a 10-inch build up of sediment and decaying shells in the corners.

Very happy to be back into the daylight again, we surfaced slowly to see heads peering down at us from above. An excited voice cried out to the signal man, "They're in the well." It had taken us only 48 minutes to swim the 2600 feet.

I said to myself, "You are a fool to do this kind of diving." But when the next job comes up, I will probably be just as excited to do it again.



This is the well where divers will surface after long, dangerous swim.

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GERALD F. COMEAU

POTLIGHTED this month is one of the east coast's first divers, Gerald F. Comeau, an extremely active personality in Northeast Council activities.

Jerry attended the first meeting of the Northeast Council in May 1955 and has served the organization in various capacities ever since. He is currently governor of the Massachusetts Council and Northeast Council tournament director including the upcoming Nubbles meet on January 22 at York Beach, Maine.

His main interests in diving center around underwater wreck hunting, cave diving and depth diving steering away from spearfishing claiming only one fish, a seven and a half pound tautog speared off Rockport, Mass., in 1958. However he has competed in all Northeast Council tournaments for the past five years and says "in view of my persistence in the face of continuous and crushing defeats I was appointed Northeast Council tournament director last year which made me automatically ineligible to compete. This, and only this, is the only thing that saved me from my sixth straight year of an unblemished and unbroken record of not even placing. Voicing the opinion of many of his fellow divers George Zinkowski of the South Shore Amphibians acclaims Comeau as an extremely good sport and a devoted promoter of the sport of diving.

Jerry became interested in diving seven years ago when he peered beneath the surface at Crane's Beach though a mask and spotted a horse shoe crab crawling across the sand followed by a school of fish. Since that moment diving has been a full time avocation. "I go underwater for the sheer pleasure and enjoyment I get from just being underwater. I enjoy a contentment unmatched by anything I have ever pursued before in my life.

The 30-year-old electronic technician has visited many of the wrecks around Cape Ann off the Massachusetts coast and was one of the first to visit the "Chelsea" when she sank in 1957. He has collected artifacts from the historic man-o-war "New Hampshire" and led an attempt to find the wreck of the "Romance," In 1954 Jerry built a home-made hand operated "hookah" rig

that nearly proved disasterous. When the device failed to satisfy his insatiable desire for underwater exploration he built a scuba rig out of a pile of surplus equipment. It functioned perfectly to a depth of 40 feet, after that Jerry had to reach over his shoulder and depress the diaphram to get sufficient air.

In 1956 he drafted the Northeast Council's accident report form, in 1957 he instituted a campaign for the adoption of a standard divers flag and in 1958 he was successful in having the council officially accept the present Divers Flag. Also in 1958 Jerry was appointed co-chairman of the credentials committee for the first convention of skin divers in Boston, which lead to the formation of the Underwater Society of America. Last year he was appointed council tournament director and with the advent of the individual state congresses was elected as governor of the Massachusetts State

Jerry who logs over a hundred dives a year lists one of his most frightening experiences when he ran out of air at 110 feet below the surface of a Rockport quarry. When he finally reached his buddy diver to signal him he was going up, his friend thinking he was holding his breath tried to hold him down. When he reached the surface he said he knew then how it must feel to suffocate.

Called a human dynamo by east coast divers Jerry is always pursuing diving. He visits clubs all over the state, lectures to groups on the sport, teaches diving classes, helps prepare the Northeast Council Newsletter, is an active member of the Bay State Aqua Club (one of the oldest clubs in the area) and dives year round, in fresh water, salt water, under ice, quarries, cave exploring, etc.

30

UNDERWATER CHANNEL SWIM

"Today," announced Sam Rockett, ex-channel swimmer and technical advisor for Jane Baldasare's abortive attemps," the first page of a new chapter in channel swimming history was written. Certainly Jane will now be followed by many other underwater swimmers until someone successfully crosses from France to England beneath the surface. It could well be her."

But the fact remains that at 9:30 that fair morning of August 17, Jane Baldasare rushed to the surface of the English Channel about six miles off the French coast and screamed in raging tones that "they forgot to turn on the air!"

Brought aboard the "Fair Chance," a 20-ton 40-foot Folkestone fishing craft skippered by Bert Green and "command ship" of her little cockleshell flotilla, Jane went into hysterics, lashed out particularly at bewildered members of her British Sub-Aqua Club supporting divers for giving her an air less tank (for which she later apologized, blaming the heat of the moment).

Warmed by a change into heavy woolens, and hot tea, and after a relaxing cigarette, Jane discussed the last moments of her attempt.

She recalled undergoing her tank



The "Fair Chance," command ship of the channel crossing fleet. (AMF Photo)

change which by that time had become a routine action occurring about every half hour. But then when she breathed in, she found no air, tried again and still nothing. Realizing, she said, that she might blackout at any moment, she surfaced in a frenzy of angered frustration. And the first attempt to conquer the English Channel underwater was at an end.

The night before had been fair and clear, the Channel's surface gentle. The "Fair Chance" anchored off Gris Nez beach, France, about 2. At first light Jane, in full skin diving kit, accompanied by two divers and Sam Rockett, were rowed into the beach to be met by a horde of British and French photographers.

This was Jane Lisle Baldasare's mo-



Jane Baldasare (AMF Photo)

ment of truth. This was her embarkation upon an adventure that no one had ever before attempted, that was suggested to her last January by a newspaperman after she had successfully set a new underwater endurance record (since broken) of more than 100 hours in a tank on a Pensacola, Florida, street corner as a "March of Dimes" promotion.

The ideal combination of beauty, youth, element of danger—even disaster, an historic "first" all fully exploited had drawn the attention of the world upon this pretty Astoria, Long Island, housewife. Certainly no other human interest story in the summer of 1960 had evoked more press attention and comment all over the world.

Accompanied by two divers, she swam to her awaiting flotilla and entered her "cage" whereupon the expedition headed slowly for England, 23 miles away.

By that time other boats had gathered—a yacht of the "London Daily Express," the "Mail's" historic arch rival, another from the "Daily Herald," a third occupied by free lance photographers and writers.

The underwater television used to observe Jane worked like a charm. Rigged on a cross-bar of the steel-pipe frame within which she swam, it transmitted a sharp, clear image to its little receiver within the "Fair Chance."

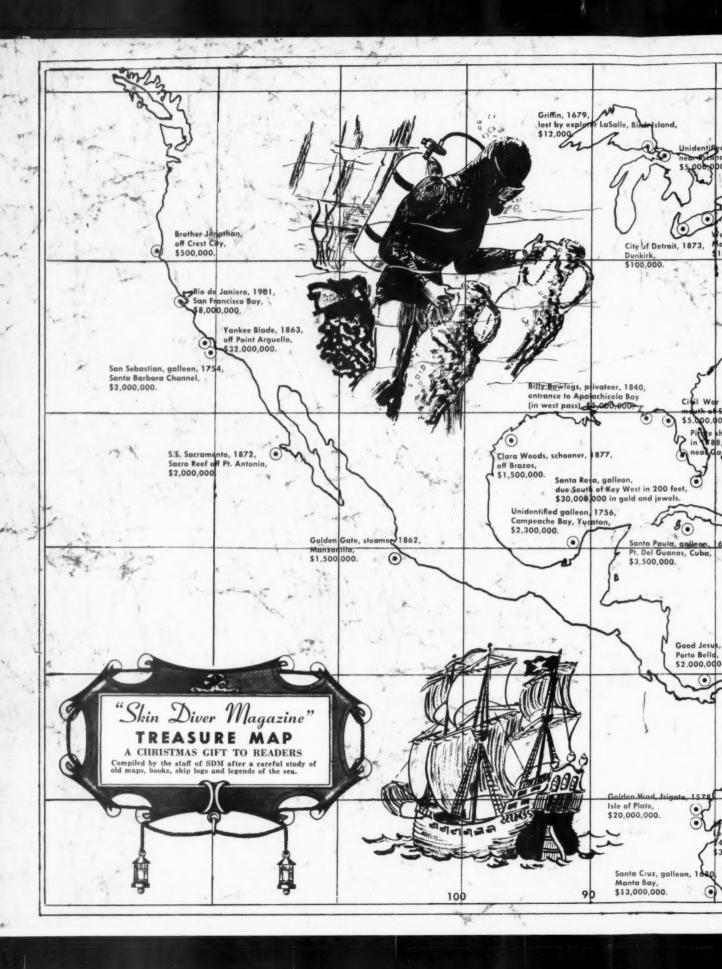
As a matter of fact, everything was perfect including a water temperature of over 60 degrees. The smoothness with which all operations were being carried out dispelled monumental long-standing doubts that such an exploit could be accomplished.

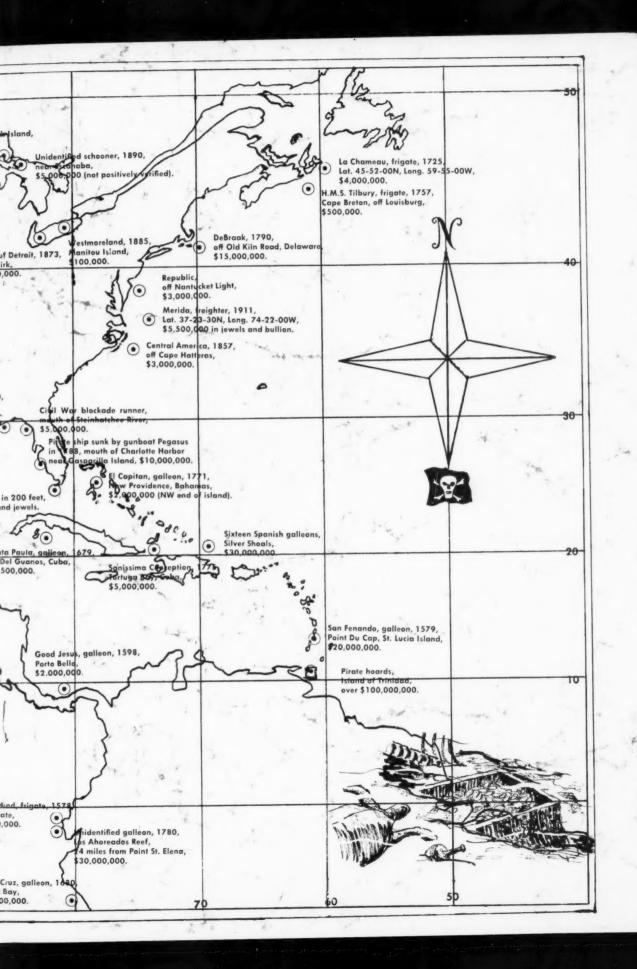
The tank changes were working well. As empty tanks were brought

(Continued on Page 45)



Drawing shows details of cage used in crossing. Jane followed bullseye on canvas while ever present support diver stood by for any emergency. (AMF Photo)







Please address all notes, letters and stuff to:
"DRIFTWOOD"
Skin Diver Magazine
Lynwood, California

"Rest and be kind. There's nothing to prove."

-Buddha

Teeesh! December is upon up once again. December with its hoho-ho, its jingling bells, its tinkling department store cash registers and the exciting scent of old money passing hands in exchange for new gifts. Teh, the season has arrived again for contrived jollity and, perhaps, among the thoughtful, a quiet recollection of exactly what this holiday originally meant. The mail is good this month. Nobody was kind enough to offer us photos of fetching lovelies (and what would be a more enthralling Christmas present than a greeny-eyed brunette in a bikini—or, at least, a good picture of same) but they have seen to it that we do not lack for screwballish notes and handwritten absurdities calculated to dismay the merry gentlemen and enrage the even merrier ladies. Maybe the photosof-ravishing-wenches epidemic will start in January. It's something to dream about instead of those lousy sugarplums anyway. While you hang a few tarnished baubles on that lopsided little tree over there, I'll lace the jetty-java with something more spirited than cream or sugar...

THE SEA-GOING, THUNDERING HEARD

This year, I'm planning a truly wonderful Christmas for my—ahem—lord and master. I'm going to start off by giving him a sumptuous breakfast in bed. Then, I will watch him open the stack of presents—all kinds of brand new diving gear which represent my pin-money hoarded during the past eleven months—awaiting him under the tree. Don't you think this kind of treatment should earn me the right to accompany him on, at least a few of his diving trips?

JODY BABBIT Lockport, New York

Talk about cunning, conniving wives . . .

My reputation for being a nonconformist and an individual stuck with me most of my twenty (and then some) years of being an earthling who seldom ventured into a puddle of water or took a bath in a tub with more than two-inches of water covering the bottom. Then, it happened! A few months ago, I became obsessed with the idea of exploring the mysteries and beauties of the "underwater world" and with that came the desire to read as much as possible about my newly found way to entertain me—and feed new trains of thought into my imagination. Needlessly to add, that's when SKIN DIVER MAGAZINE and your "allotted space" came into view. Try as I might, I cannot resist contributing a word or two and, thus, have to admit defeat by following the crowd. I accept your column as my weakness so please be gentle with your power. May I add that the fellows who've been teaching me their ways (diving ways) don't mind at all that I'm a girl. They even call me "Sain." And they let me know I'm a real diving buddy to them. The only thing is, they insist upon helping me into my diving gear so I may remain ignorant of that procedure for a long time to come.

FLO (SAM) CAMPBELL Daytona Beach, Florida

Tsk, tsk, tsk. Now you see exactly WHY I've tried to keep innocent young girls away from those worldly, sly skin divers.

I'm a rod-fisherman and I think you and your rotten little Driftwood column are the greatest things that could possibly have ever happened to insure the eventual day when skin diving will be made totally illegal! Keep it up, Kohler. Never slack off! You are impressing important men, in state legislatures everywhere, with your cries and complaints about diving clubs—and you're providing the fine old sport of real fishing (Rod and Reel, that is) with the best, loud-mouthed champion we've ever had! Keep it up, blabber-face! You're sinking skin diving and the nitwits who follow that murderous sport better than anyone on our side ever could!

JOHN CONDON Hillsboro, Ohio

What's a Rod and Reel? It sounds vaguely like something those teenagers would endorse.

The time has come to put an end, once and for all, to the flood of vituperation which ensues from your column each month re diving clubs. As president of the best organized club in Pacific waters, let me point out just two factors that make our club distinctive. Our entire membership is always present at every meeting. In addition, club bylaws dictate that, at least, 50% of the active membership of our club be present at every dive. Our membership has tolerated your abuse to a point which surpasses irritation and righteous anger, and has arrived finally at downright loathing. Therefore, by unanimous consent, you have been judged worthy of honorary (no voting privileges) membership. Enclosed you will find your officially attested membership card and club insignia patch. We are also attaching the signatures of our entire club (both of us) and, hereby, solicit sea and undersea stories from other clubs who can boast equal organizational structure. (We won't fool around with little outfits.)

CHUCK DREW, President MIKE OSBORN, President Flipper Flopper Flunkies Sagami Bay, Japan

Fellows, I'm touched. I mean, really. And you have accomplished what others have failed to do. I solemnly swear, from this day forward, to never again put the knock on any skin diving club the precise size of ours. That's a sacred promise, brother FLIPPER-FLOPPER-FLUNKIES. Gee, what an honor! Only three FLIPPER-FLOPPER-FLUNKIES in the whole stinkin' world—and I'm one of them! Boy, if there's anybody I can't stand now, it's them unorganized divers who roam around, causing all kinds of individualistic trouble.

I'm having a little trouble with my skin diving and I'm hoping that you will let me benefit from your years of experience and skill by helping me with this problem. Whenever I dive—and I do regularly—in water where there are girls I cannot seem to focus my eyes properly underwater beyond the distance of the nearest pair of shapely, female legs. This is causing me all kinds of trouble from hitting rocky bottoms, getting tangled in kelp and swimming right past ab-loaded spots without noticing them. In fact, I haven't been able to descend any deeper than five-feet in over a year as that seems to be the depth where all those lovely female limbs stay. Although I've been skin diving for better than twelve-years, I think I badly need your help.

SHELDON CRAMER Hertford, N. C.

What's the matter with you? Don't you realize you've unwittingly reached the very zenith of normal skin diving? Yeeesh!

I know how you generally feel about diving clubs, but I'd like your opinion, nevertheless, about a club (the one I stupidly joined recently) which devotes all its time to sitting around, swilling beer and talking about diving. That is, it does when it's not boring itself to pieces with endless parlimentary procedures. I always figured (your blah to the contrary) my best chance of enjoying this sport would be gained by joining a good club. I'm beginning to think I was wrong.

LEONARD KURSH Auburn, Washington

You'll have to state the precise size of your club before I can knock it: I'm committed now to protecting 3-man clubs everywhere in the whole stinkin' world.

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SKIN D

A number of us have almost gone batty, trying to guess what it is you've been talking about when you refer to "urchin glop." We've even held contests with prizes for the correct definition—assuming you would, eventually, tell the exact nature of urchin glop during one of your more coherent spells. Can't you give us a hint as to what this mysterious substance (if it is a substance and not a state of mind) can possibly be?

MARY BINDSON Port Arthur, Ontario Canada

Well, honey, let's put it THIS way: You wouldn't want to step in the stuff.

MUCH ADO ABOUT REAL NOTHIN' GOING DOWN?

"The grounding of a new bottom in the editorial chair has all us hacks fairly trembling in our surfmasters. What will he do? Who'll get his cards? How can we hang on to these tremendously lucrative jobs? What will become of our Rolexes, our personal Aquachargas, our flits to Palinure and our wives and kids (in that order)? We are wondering if the new boss would like us to go all Kohler and Driftwood on him. Kohler keeps his pen wet the circulation boys happy and his own dollar-riffing finger trembling by writing controversial stuff—"bug sturring"—as it's known in the trade. At the moment Kohler's particular bug is Clubs, and he runs 'em down, smites 'em hip n' thigh at every opportunity. His latest effort is to describe the newly formed Underwater Society of America as "the fattest organisational farce ever spawned." This shows the delightful degree of editorial tolerance as it is directly opposed to the apparent policy of his journal which is dedicated to supporting the Underwater Society of America. But old Kohler knows what he's at—he can even write passable prose at times, albeit in a wan sixth-form "at last I see the meaning of a willow tree" style—and nobody knows better than him that if it hadh't been for Clubs and the organisation of Clubs this diving business would long since have perished under the tread of legislation as the mountains of corpses cluttered up the municipal trash dumps. Anyway Kohler should have nothing but gratitude for Clubs, seeing that they've given him the top job in American diving—the organisation of the National Beach Temptress competition.—(Triton)."

Have you seen the blasting given you by BEN in the September-October issue of Triton, the British diving club magazine? Man, the guy who writes that column really took after you with a stick in both hands! Enclosed, I'm sending you the paragraph which I've torn out of the Going Down? column. What kind of a reply can you offer this minor triumph?

ARNOLD NORTH Los Angeles, California

SDM should have the guy who writes the column in TRITON magazine! Now there's a genuine, gentlemanly, intelligent humorist who knows his business and writes a superb piece of real humor! I suppose you'll try to cut him dead or even ignore him, but I enjoyed his remarks as I've never enjoyed anything you write.

JEAN BARLOW St. Paul, Minnesota

BEN, of the Triton magazine, deserves some kind of a medal for taking your carefully built-up personality apart and exposing you for the dastardly "bug sturrer" you are! I think we should get a petition going to bring BEN to these United States to replace you!

NORMA FERRELL Chicago, Illinois

Personally, I think you owe it to your loyal Driftwooders (including me to fight back when this limey who scribbles anti-American prose for that veddy precious Triton rag decides to have a whack at you—especially since I cannot remember you ever giving him any trouble. Blast it, Kohler, the price of being truthful now seems to be taking a lot of crap-comment from snide Englishmen who probably envy you for both your courage and your writing skill.

REX JOHNSON Albany, New York

When I read Going Down? by BEN in the latest issue of Triton, I thought I'd collapse with laughter! He sure put you in your place! It should be interesting to see what kind of weak comeback you'll throw at BEN's marvelous thumbnail sketch of your ridiculous theories!

GEORGINA VAN DURM Milwaukee, Wisconsin Yes, I have read the remarks of BEN in TRITON—thanks to editorial sadist Ross Olney, who was kind enough to send me a copy of that particular issue. It was an interesting experience. BEN (whomever he or she may be) writes succinctly, defily and with a trenchant skill that denotes a really splendid humorist. No use denying THAT. It might be nice if BEN knew something of what he or she were writing about, but, then, it can be safely assumed BEN is a member of the B.S.-A.C. and, therefore, working under conditions hardly conducive to freethinking and factual reporting. Anyway, Olney and I are presently engaged in efforts to discover the true identity of this BEN person. According to the information we're getting, it has to be one of three people: (1) A 72-year old, Sussex spinster known for her exceptional hatred of everything American, (2) Rodney Burr-Glang, a rather scruffy pubowner whose London tavern was defaced by drunken American soldiers in 1918 or (3) A talented chap, named Alan Broadhurst, who writes the kind of stuff Steve Potter conned the British into thinking HE was writing. Don't worry, Driftwooders, we'll find out who this BEN really is. I'm going to continue twisting Olney's arm until we do. And when we DO...

DEPARTMENT OF WIDE-EYE NEWCOMERS

I've been following the hue and cry in your column for about three issues now. It's the most fantastic waste of space I've ever seen. You seldom mention skin diving per se, and you never have anything constructive to offer when you do infrequently touch upon the sport. I assume you married the publisher's daughter?

GWEN MIDDLETON Detroit, Michigan

No, she's lovely all right, but she's a little young for me.

When I first read Driftwood, I just couldn't believe my eyes. I think the whole thing is a monstrous fake. I don't believe any of those people actually wrote letters: I'll bet you authored all of them yourself just so you would have nutty letters to make snotty answers for. I've been trying to figure out the reason for having a thing like Driftwood in an otherwise sane, interesting and authentic magazine, and it's beyond the likes of me.

THOMAS SIMPSON San Francisco, California

I'll buy that.

Kohler, a long, long time ago I remember you and some diver got into awful melee over manta rays. What ever happened to that guy, anyway? I remember he was threatening to poke you in the nose—then, he seemed to get lost and nothing more was ever heard from him.

JACKIE WELDON Fulton, Kentucky

He must've changed his alleged mind.

As a relative newcomer to skin diving and to the *Driftwood* page, I thought I'd offer up my opinion that your column would be a lot more interesting to newcomers like myself if you'd concentrate on putting more factual information about diving and underwater adventure into it, and less of this dull business about who likes you or who loathes you. You may be a celebrity to some people, but you're simply a space-wasting hog to many others. How about it?

DON GIBBS Pueblo, Colorado

See that end of the jetty over there? It's for leaping into deep, blue oblivion. You have my express permission to use it. So, jump.

Yesterday, I saw your column for the first time. I'm told it's been going on like that for years. Do you mind if I ask Why?

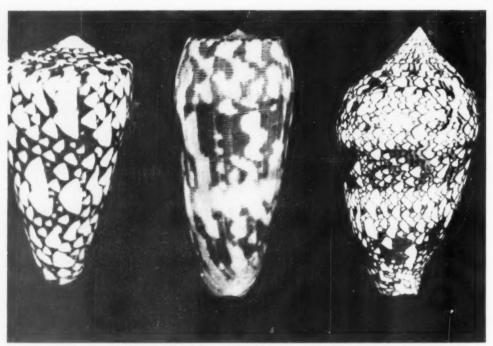
HARRIET KING Decatur, Illinois

No, I don't mind if you ask, but just don't expect me to supply damn-fool answers to damn-fool questions when I'm terribly busy trying to make this place a storehouse of information and constructive knowledge of skin diving for people who have to read instructions before they can stick their heads underwater.

... and, hey, didn't you do a keen job of loading that little tree with pretties! Now I suppose you'll wanna go home and fix up your own Christmas tree, leaving me sitting on this lonely jetty clear until next year. Well, that's the way the urchin glops. Next time you stumble out here, bring some photos of sexy girls wearing scuba or snorkels if you can't bring the girls themselves.

CARLOS KOHLERINO, Hon. Pres. Flipper Flopper Flunkies

ORIGINAL SPEAR-FISHER



BEAUTIFUL BUT DEADLY! When alive, the dwellers within these Pacific cone shells can inflict a dangerous and sometimes fatal wound if carelessly handled. The marbled cone, Conus marmoreus, (left) feeds on other cone shells. Conus striatus (center) feeds exclusively on fishes, while Conus textile feeds on other snails. (Photo from author)

SHIRLEY M. TREFZ

THERE IS A SNAIL which actually catches live fish! How, you may well ask, can such a relatively sluggish creature capture and eat anything as alert as a fish? Yet fishes apparently are the exclusive food of certain tropical marine snails which belong to the cone shell family. Even more curious, these snails capture their prey by spear-fishing!

The cone shells are among the handsomest animals in the sea. Their

striking patterns and varied colors have long been the delight of shell collectors. Live specimens must be handled with great care, however, because these apparently harmless snails can strike like angry snakes. Furthermore, they inflict a small but possibly mortal wound by means of a tiny dart and a virulent poison. Several instances in which cone snails have caused death are recorded in scientific and medical literature.

A cone shell has within its gullet a bundle of murderous barbed darts which it uses, one at a time, to stab and poison its prey. These hollow shafts are actually specialized teeth, made of a stiff, glassy material, and resemble a harpoon with hollow shaft and one or more prominent recessed barbs.

The upper end of these darts is

supplied with a paralyzing venom from a large poison gland. When the victim, be it a worm, a fish, or another snail, is "speared," the poison affects the nervous system, causing paralysis and death, often within but a few seconds.

Observed in Aquarium

At the Hawaii Marine Laboratory, in Honolulu, Dr. Alan J. Kohn and colleagues actually observed one of the spear-fishing cones in action in an aquarium. The snail studied was the striated cone (Conus striatus), the name being derived from the fine parallel lines or striae marking the shell. This species apparently subsists on fishes, because examination of the digestive tracts of several specimens

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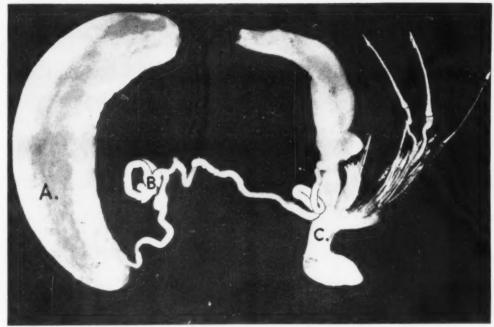
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HERE IS WHAT LURKS behind beauty of the spear-fishing cone shell. The poison sac (A) is linked by the poison duct and gland (B) with the radula sheath (C), which contains the bundle of darts seen to the right. Each dart is used just once, and then a new one replaces it in the proboscis. (Photo from author)

revealed the presence of fish bones and scales.

The snail was placed in an aquarium with several inches of sand on the bottom. It immediately buried itself in the sand. However, the animal allowed its siphon to extend above the sand.

Tubular Nose

This siphon is a kind of "sniffing" organ. It directs a stream of water into the snail's body and over a sensory structure which enables the snail to taste or smell the surrounding water. By this means, rather than by the sense of sight, the snail detects the presence of a nearby fish.

As soon as a fish was placed in the aquarium, the snail became active. It pushed itself up out of the sand, and extended its long tube-like snout or proboscis. The tip of the proboscis moved back and forth, following the swimming movements of the fish. Within the proboscis the snail held the beautifully designed and formidable dart.

Quickly Attacks

When the tip of the proboscis touched the fish, the dart was thrust into the fish with considerable force and lightning speed. The harpooned fish writhed and flipped for a few seconds, and finally ceased its struggle as the venom took effect. The snail, meanwhile, opened its cavernous mouth, and the proboscis, holding tightly to the upper end of the dart, drew the impaled fish into the cavity.



Poison dart from the fish-spearing striated cone shell. This enlarged view shows the barbed tip of the weapon. The dart is hollow, about 5/16 of an inch long, and contains the paralyzing poison. (Photo from author)

A striated cone can eat a fish equal in length to its own shell, but the snail must digest the fish before its body can withdraw into the shell again. This process requires several hours following a meal. The poisonous dart, oddly enough, is taken into the digestive tract along with the victim, and a new one from the bundle of spares takes its place in the proboscis.

Cone shells are not a menace to the average swimmer, though cones have been responsible for the death of a number of humans, because they are usually at least partially buried in sand or hidden under rocks. However, shell collectors and skin divers should be aware of the potential menace in some of them. Although several species of this family are small, and perhaps do not have enough poison to kill a man, others are dangerous.

If they must be handled, it is best to hold the snails by the broad back end of their shells, with the narrow "business end" directed away from the hand. It should be remembered that the animal is capable of extending its body well beyond the opening of the shell, and, if the probiscis is extended, do not try to pick it up.»

News Current

NEWS FROM AROUND THE GLOBE COMPILED AND EDITED IN SKIN DIVER OFFICES. Local diving news from readers welcomed.

TYRRHENIAN SEA-One of the largest underwater sea monsters ever built for a movie has been constructed off the island of Ponza in the Tyrrhenian Sea to do battle with Steve Reeves in "The Thief of Bagdad." The "monster" is a crab measuring 45 feet in height with 15 foot pincers. The battle with Reeves is the climax of the Arabian Nights spectacle.

FITZWILLIAM, NEW HAMPSHIRE-A trio of divers from the Toy Town Tadpoles recovered a dugout canoe buried in the mud at the bottom of Laurel Lake, The divers, Richard Oinonen, Ensio Oinonen and Donald Capman, believe the canoe was probably used by French trappers years ago. The divers hope to raise a sailboat sunk in the same general area of the lake.

AMASA, MICHIGAN-Skin divers of the Iron County Scuba Divers Club aided the sheriff's department in the search for a drowning victim in the Paint River. After a two-day search in swift currents the body was recovered. Divers in the search were Keith Harris, Calvin Carlson, Ronnie Scott, Geno Guiliani, Donald Hooper, George Tredo, Dick Halvas, Calving Vezzetti, and four state police divers.

RIVIERA BEACH, FLORIDA-Edward Zillious claims to have speared the first tarpon ever taken while skin diving. The 26-pound, four-foot tarpon was speared off Juno Beach.

ROCKCROFT, ONTARIO, CANADA - Two Toronto skin divers, Harry Eames and Gordon Browne, have turned their hobby into a money-making enterprise. They retrieve sunken logs for a Peterborough Lumber Co. The pair salvaged enough logs during the summer to pay for the \$1400 worth of equipment they bought. The logs of pine, maple, poplar, birch, hemlock and oak sank from drives over the last 40 years and are all usable.

GARDEN CITY, NEW YORK—Members of the Aqua Divers Inc. demonstrated diving equipment and awarded a lung and div-ing course at the North Shore Hospital Jackpot Party. Top prize at the hospital benefit was a 1960 Jaguar sports car.

HONOLULU, HAWAII-Four Navy men of the Pacific Missile Range who retrieved the first capsule ever recovered from orbit in outer space were awarded medals citing the recovery as an outstanding feat. Receiving the medals were Lt. Albert C. Pospisil, pilot; Lt. (jg) Arthur S. Anderson, co-pilot; Clifford C. Allsup, plane captain, and Robert W. Carroll, scuba diver. The four men were crew members of the Navy helicopter that recovered the nose cone of Discoverer XIII.

MILWAUKEE, WISCONSIN-The third annual all-night simuto test harbor security. One of the "enemy" divers succeeded in blowing up a pier on Jones Island but was "captured" by defenders. Members of the Milwaukee coast guard reserve and area divers participated in the annual event.

PAINESVILLE, OHIO-Skin divers from the Mentor-on-the-Lake air-sea rescue unit were successful in recovering two dia-mond rings from four inches of mud at the bottom of Lake Mentor. The rings were accidentally dropped overboard by Mrs. C. S. Stuckenholt. One of the rings was recovered by William Schroeder and the other by Edward Demore after an 11-hour search.

VICKSBURG, MISSISSIPPI—A 5,000-pound federal naval gun that fired on Vicksburg in the Civil War siege almost a century ago was returned to the city waterfront. The historic relic was salvaged from the Yazoo River where the gunboat Cairo was sunk by the Confederates on December 12, 1862. The gun was recovered by Ken Parks and Skeeter Hart who have formed a non-profit corporation "Operation Cairo, Inc." to raise the Cairo. The Civil War vessel will be exhibited at a naval museum a Vicksburg.

ERIE, PENNSYLVANIA-A "memorial" caravan to the site of a mass burial of rock n' roll records included several skin divers. Radio station WLEU dumped seven thousand records into Lake Erie a year ago as it ended broadcasting of that type of music The divers job-to determine the condition of the records!

LA JOLLA, CALIFORNIA-Head lifeguard at La Jolla Beach Fritz Fehrensen speared an eight and a half foot sailfish in shallow water near La Jolla Beach and Tennis club. The sailfish is believed to be the first ever captured in California waters.

CHICAGO, ILLINOIS-Skin divers located the five victims of a tragic crash of a light plane in Lake Michigan. The plane's occupants were the pilot, his wife and four young children. One of the children was recovered shortly after the crash

CALIFORNIA-A 25-year-old diver, David F. Merwin, owes h life to a fast thinking submarine captain. Merwin was stricken with the bends while diving off the destroyer Cook, afloat during maneuvers near the Hunter Liggett Military Reservation. When the paralyzing bends struck he was 200 miles from a recompression chamber. Lt. Cmdr. C. H. Lowry, captain of the Redfish, submarine in the flotilla, quickly ordered Merwin placed in his ship's escape hatch. The sub then plunged to a depth of 125 feet. With a corpsman at his side, Merwin stayed in the hatch 16 hours as the sub traveled north to San Francisco and a naval hospital The submarine rose slowly along the way, gradually creasing the pressure in the hatch. At the Oakland Naval Hopital Marwin was placed in a recompression chamber for complete treamtent.

HOLLYWOOD, FLORIDA—Among the reports from the east coast tangle with Hurricane Donna is a story from a Florida lifeguard-skin diver. Bert Cutler believes fish know when a bad storm is coming as they swallow rocks and stones for ballast to keep from being tossed around. Just a few days before Hurricans Donna arrived in Florida Cutler speared several fish with rock

KEANSBURG, NEW JERSEY—The water soaked luggage of Dutch atomic scientist Dr. Cornelius J. Bakker, who died in a plane crash in Raritan Bay, was recovered by divers Bill Sebeste and Robert Halvorsen. The luggage was impounded briefly by the FBI before being released.

ST. PETERSBURG, FLORIDA-Divers were called to help re cover the wreckage of a jet aircraft that crashed into Tampa Bay near Skyway Bridge. The aircraft was surfaced after three days of exploration.

WILKES-BARRE, PENNSYLVANIA-An ancient dugout canon was recovered from Lake Winola by divers Frank Murphy, James Billings and John Catterall. The trio hopes to find other artifacts

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SAVANNAH, GEORGIA—Salvage divers are recovering parts of the sunken blockade-runner CSS Nashville from the Ogeechee River. Col. Allen P. Julian, historic consultant for the George Historic Commission, was bubbling over as divers brought uppieces of the speedy Confederate ship. Divers on the project are Bobby Waters, Fred Seeby and Paul Garrett.

DETROIT, MICHIGAN — An inexpensive item invented in Japan is making an appearance in Detroit swimming pools. The device consists of a snorkel that floats on two rubber tanks. A four-foot plastic tube leads from the snorkel to a breathing mask to allow backyard pool swimmers a view of the items on the bottom of the pool.

COHASSET, MASSACHUSETTS—A bronze mast band dated 1861 and believed from the wreckage of the Allentown has been recovered by divers near Minot's Light. Charles Wood and John Furey recovered the band which bears the inscription "Hicks & Badger, Boston, Mass. 1861." The Allentown sank in 1888 with the loss of its entire crew.

MILWAUKEE, WISCONSIN—Two Milwaukee divers escaped possible serious injury when their 15-foot fiberglass outboard boat caught fire and sank in Lake Michigan. The two divers clad in wet suits jumped overboard and were picked up by an unidenified boater.

MIAMI, FLORIDA—Loot from a Spanish galleon sunk in the Florida Keys 227 years ago was moved into Miami in the latest skirmish between the two rival crews of treasure hunters. Capt. Tim Watkins and the six-man crew on his 56-foot salvage vessel "Buccanner" brought the loot here from the wreck site some six miles off Tavernier. Arthur McKee of the "Jolly Roger" and owner of a sunken treasure tourist attraction at Plantation Key was expected to start legal action against Watkins. Watkins is reportedly planning to open a sunken treasure museum in Miami. McKee claims the loot is under a 10-year contract he holds with the state.

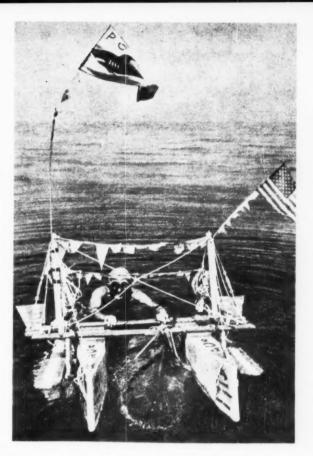
SAN DIEGO, CALIFORNIA—The Copley News Service is distributing the first skin diving comic strip to national newspapers. The comic strip, "Thorn McBride" will feature a nuclear submarine in a wide range of experimental missions dealing with oceanography and diving. "Thorn McBride" was developed by William Boyd. The artist is Frank Giacoia and the writer Kenneth Simms.

HALLETT COVE, AUSTRALIA—Murray Bampton readied his hookah gear and descended to the bottom fifteen feet down. When he inhaled he lost consciousness and floated to the surface feet first. Bompton was given a tank of nitrogen instead of compressed air by a firm that thought they had compressed air. The diver was held upright by a boy until two firemen were able to pull him aboard a boat and apply resuscitation including mouth-to-mouth. After his recovery Bampton said the nitrogen was tasteless and odorless and he had no sensation or discomfort when inhaling the nitrogen. He had no idea how long it was before he lost consciousness and remembers nothing until he came to on the boat. The diver was transferred to a hospital and given the own of similar color. However upon close examination the nitrogen cylinder was marked in small letters on the neck with "N2."

McGREGOR BAY, ONTARIO, CANADA—Thirteen-year-old Tom Meanwell set out during a summer vacation in Canada to recover a ring his father had dropped in McGregor Bay in 1944. His parents smiled but while the youth was chasing a crayfish he overturned a stone and found the ring. Now Mr. Meanwell proudly displays the ring his son recovered after sixteen years.

FORT WAYNE, INDIANA—Another youthful diving story concerns a 10-year-old boy who pulled a diver to safety. The diver developed leg cramps and the young boy, Steve DeWald, was tanding on a nearby dock. When the diver yelled for help the youth jumped in and pulled the man to shallow water.

BREMERTON, WASHINGTON—Sharp-eared residents and two is divers are credited with saving the city of Bremerton conditionable money. Residents heard dripping water and the two divers, James Hill and Gene Trucker, were called to check the submarine line across the bottom of Port Washington narrows. They discovered two bolts in the 12-inch cast iron pipe had rusted and parted, which was allowing a million gallons of city water to escape every day for four days. The divers replaced the bolts stopping the leak. Public Works Commissioner Fred Schoneman said the two divers will be inspecting the rest of the line, saving the city a lot of money.



KEY WEST, FLORIDA—A shark propelled craft, manned by a spunky gent of 60, may soon be off on over a hundred-mile trip from Key West to Bimini. The French inventor of the unusual craft, Paul Chotteau, claims sharks make wonderful motors except that they sometimes decide to go straight down. But his craft is unsinkable. Years ago he consulted Albert Einstein, who gave him the mathematical principle that would enable the boat to withstand a downward tug of eighteen thousand pounds. After catching a shark Chotteau harnesses the beast between the pontoons of his craft. No stranger to the ocean Chotteau in 1936 made the longest ocean swim recorded at that time from Catalina Island to Santa Monica, Calif. In 1940 he broke this record and established one that still stands—114 miles from Bimini to within nine miles of Palm Beach, Fla. Chotteau's one dream is to make the trip to Bimini by his shark boat and says he'll leave as soon as he gets a fifteen-footer and saves enough money to pay helpers as he harnesses the monstrous shark to his boat.

SAN DIEGO, CALIFORNIA—A 600-pound cannon has been donated to the new marine museum at the Naval Training Center by Lt. Cdr. Kenneth N. Bebb who found the cannon in 1954 while diving near Boca Chica, Fla.

JEFFERSON CITY, MISSOURI—Members of the St. Louis Underwater Recovery team spent most of their summer diving into the state's springs ridding them of the accumulation of old bottles, cans and debris. The state park board director remarked bitterly that it looked like the official state flower was a beer can. Following the clean-up campaign of the divers the park director hopes to have legislation enacted to stop park vandalism.

HOBOKEN, NEW JERSEY—A team of divers who recovered a 50-pound safe from the depths of the Hudson River were asked by officials to continue a search of the area for other discarded possessions of a crime ring. The diver-state troopers are combing the area for a .38 calibre revolver used in the slaying of a police lieutenant.

LAKE ESTELINE, TEXAS—Two divers in a group of 25 including divers and rockhounds were caught in an undercurrent at 115 feet and were dragged into an underground cavern to a depth of 156 feet before they could recover their hold on safety lines.

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UNDERWATER DEMOLITION TEAMS

(Continued from Page 19)

The trainees are rotated from water training to acting as officer in charge of the drop, then as the snare pick-up man, and finally as the fellow who is in the stern of the rubber boat who hauls the men onto the boat.

Another afternoon finds the trainees on the obstacle course. This course has 22 obstacles, all designed to try a man's physical endurance. Average time to complete the course is about 35 minutes as compared to the required UDT time of 15 minutes. Running over loose logs, swinging on hanging ropes, storming high walls, climbing up and down high cargo nets, sliding down a high line over a water hole, crawling under wire entanglements . . . all this, and more, while instructors are continually harrassing the trainees.

The night problem I witnessed was an infiltration attempt. The trainees were to follow a guide wire through a wooded area, and try not to trip any wires that were attached to flares, and explosive charges. A heavy rain started to fall as the patrol started a single file along the ground. We could occasionally hear the men as they slowly worked their way along the course. Suddenly a scream filled the air as an instructor ran around trying to draw some reaction from the trainees, but they remained quiet. Soon a flare lit up the area, and we could make out a trainee or two as they lay camouflaged on the ground. Occasionally an explosive charge would go off, but the men remained calm and proceeded toward their destination. The men are encouraged to use their ingenuity during training and evidence of this became apparent when we could hear wire cutters clipping the trip lines thus eliminating flares and explosives. This plan was not on the agenda, it was the result of some fast thinking by a trainee. In other problems the trainees have been known to outwit their instructors; this is encouraged.

This class was originally composed of 62 enlisted men and 17 officers, but by the time Hell Week (fifth week) had passed, there remained only 19 trainees still willing to continue. Most of the others had quit; very few are dropped. The normal rate of attrition is 80%. This may sound like a high figure but I prefer to think that having 20% succeed such a rigid course is quite a feat. These men must be tough;

they must be willing to put up with a lot of abuse; they must be able to think fast; they must be self sufficient once they are sent on a mission; they must be UDT quality.

Further training continues: daily swims until a one mile swim in the ocean is completed, then fins are used working up to a seven mile ocean swim ... hikes and runs every day with a final run of 18 miles ... later after return to Little Creek they may be parachute trained and trained to operate from helicopters. After 16 weeks they are ready for advanced training.

Advanced training starts with one week at the Escape Training Tank in New London, Conn. Then off to St. Thomas in the Virgin Islands for underwater training using scuba equipment and rebreathing apparatus... night scuba diving... missions aboard submarines that can deliver them anywhere they are required to go.

Do you still think you can make the Team? Most of the instructors think you are to soft, not in condition, not willing to work hard enough. This is an elite outfit. I have seen the respect accorded them by their fellow sailors; I have seen rough, tough Marines nudge one another and say, "There's a UDT man, they are the best." You can bet they are, thanks to their skipper, their instructors, their desire to be the

SKIN DIVER HEART ATTACK VICTIM SAVED BY SCUBA

N THE weekend of October 8th-9th, 11 Los Angeles area skin divers boated over to Catalina Island for a lobster hunt. At dusk they cruised into a cove and crawled into sleeping bags for the night.

About midnight a high tide began to push their boat up on the beach. Thereupon, one of the party, Master Sergeant Frank Boisvert rushed to the water's edge and attempted to push the vessel off the sand, subsequently suffering a heart attack as a result of over exertion.

Fortunately Rick Russell, Los Angeles County Scuba Instructor, was with the group. Taking command in the emergency, Russell shouted to diver

Bill Wallace to get him an air tank fast.

After quick inventory of the lungs available, Russell and Wallace selected the only one that would accomplish their purpose—a Waterlung, because of its manual control clearing button.

Placing the mouth piece into the victim's mouth, Russell pressed the regulator clearing button on the second stage forcing a healthy shot of air into Boisvert's lungs, repeating the process frequently until resuscitation was accomplished.

After more than two hours of treatment by the divers and a doctor who subsequently arrived, the sergeant was put aboard the cabin cruiser "Laissez Faire," captained by Art Wood of San Pedro, who had been standing by throughout the night to assist in every way possible.

The Sergeant, with the Waterlung breathing aid, was then transported to Avalon, Catalina, and from there he was flown to the Army hospital at Fort McArthur, where he is now convalescing satisfactorily.

The Waterlung which shared rescue

honors with Rick Russell, Bill Wallace, Art Wood and the rest of the party, is manufactured by Sportsways, Inc.



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Bill Wallace, who played an important part in resuscitation, is shown wearing lifesaving equipment. (Photo by The 6 Watson Bros.)

SKIN DIVER—December 1960

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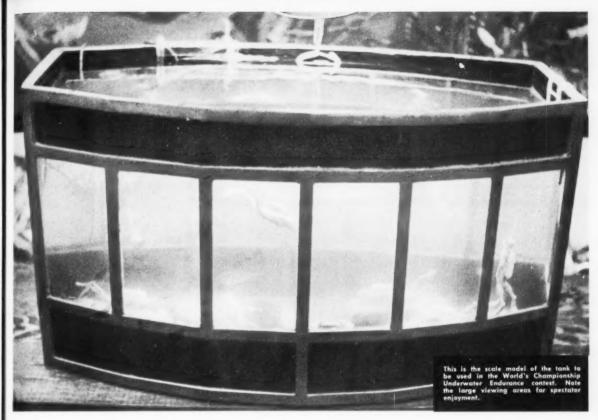
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WORLD'S CHAMPIONSHIP . . .

UNDERWATER ENDURANCE

The feature attraction, and easily the biggest publicity stunt to ever hit Toronto's Canadian National Sportsmen's Show, will be the World's Underwater Endurance Championship. With skin diving one of North America's fastest growing sports, the Sportsmen's Show committee was quick to recognize the great public interest in marathons or endurance contests, so when the idea was presented they knew it would be an immediate hit.

There was, however, one major problem. Endurance records in the past have been made by individuals submerging in a swimming pool and staying on the bottom until the record was established. This, from a specta-

tor standpoint, was almost useless since the diver appeared as a vague blur under several feet of water. The answer . . . a special tank that would enable several hundred people to view the contestants at one time and with the utmost clarity.

Design engineers were called in and plans were made. Finally a scale model, shown here for the first time, was completed. The tank when completed will be 17 feet long, 10 feet wide and nine feet in depth with sides of plexiglass allowing a viewing area of over 300 square ft. When filled it will hold over 150,000 pounds of water and will be equipped with a filtration unit and a water heater to maintain purity and

even temperature at all times.

There will be ten contestants selected to compete in the endurance attempt, all holders of former records and each having proved his or her ability to stay underwater for a period of at least 48 hours. The current record is 104 hours and 33 minutes and it is felt that with the prize money and personal recognition to be gained, this record will be easily surpassed.

Safety has been taken into consideration. One permanent air station and two reserve stations will be set up so that the contestant's lungs can be filled on location with no possibility of a

(Continued on Page 46)

NATIONAL UNDERWATER PHOTOGRAPHIC EXHIBITION

Applications for the first annual National Underwater Photographic Exhibitions to be held in conjunction with the fourth International Underwater Film Festival are open, it was announed.

The competitions are being sponsored by the Underwater Photographic

FOURTH ANNUAL

UNDERWATER

FILM FESTIVAL

Society, Los Angeles State College, and "Skin Diver Magazine."

Winning photographs or films in each division will then be shown at the Underwater Film Festival slated for the Santa Monica Civic Auditorium January 20 and 21, 1961. Judging will be held at Los Angeles State College January 5 and 6.

Multi-million dollar Santa Monica Civic Auditorium,

The greatest array of photographic talent in the world will be seen at the Film Festival. In addition to Luis Marden, chief photographer of National Geographic; Dr. Andreas Rechnitzer, scientistin-charge of the Bathyscaph program for the U.S. Navy Electronics Laboratory; and famed construction expert E. R. Cross from Hawaii, another great's work will be shown.

Victor de Sanctis of Italy has agreed to show his films one of the nights.

These screenings, coupled with the winning works from the Underwater Photographic Exhibitions, makes this two-day film festival the most rewarding experience for divers. A queen contest—to determine "Miss Underwater Film Festival"—will be conducted by the independent public relations firm of Norman Lee Bennett Associates.

The contest will be held among members of the various diving clubs in the Southern California area. Miss Film Festival will reign over the two day underwater spectacular set for the Santa Monica Civic Auditorium January 20-21.

Entrants are asked to submit photographs which will be used in the preliminary judging. The finals are set for a Los Angeles hotel pool in early December.

Applications for prospective entrants will be available at all recognized clubs. Only one entrant per club is permitted.

Judges for the competitions are Jim Auxier, editor, "Skin Diver Magazine"; Ernest Brooks, Brooks Institute of Photography; George W. Cushman, National Division Chairman, Motion Pictures, Photographic Society of America; Stuart M. Ogg, Mitchell Camera Company; and James Buxbaum, story editor, ZIV Television Productions.

Applications and information concerning the competions may be obtained by writing Howard Kennedy, 1486 Harding Ave., Pasadena. California. Closing date for all entries is December 31, 1960.

Judging will be on black and white prints, color slides, and 8mm and 16mm movies.

Because of the fantastic increase in interest in skin diving, scuba diving and all aquatic activity, the Film Festival this year is being expanded to a two night event.

In addition to the showing of the winning films and slides of the Photographic Exhibitions, examples of the work of some of today's great adventurers will be shown.

Luis Marden, a member of the Senior Editorial Staff of the National Geographic Magazine, this time will be honored as Underwater Photographer of the Year. The coveted award will be bestowed upon Marden for his work on the sunken city of Port Royal (in National Geographic), the fascinating study deep in the Mayan sacrificial well, and the thrilling photographic study of the ill-fated sailing ship Bounty.

His footage on the discovery of the sunken Bounty will be screened. Other special films planned to be shown are the best examples of commercial underwater footage for television and movies and an example of what life was like one million years ago as shown in films taken by scientists at Scripps Institution, deep in the Pacific from a bathyscape.

Underwater photographer Marden discovered Captain Bligh's Bounty off Pitcairn Island on January 23, 1957—167 years to the day that her mutinous crew burned and sank the British warship. The discovery climaxed a sixweek search in the turbulent waters of Bounty Bay.

Marden follows in the footsteps of other greats who have been lauded for their work by being named "Underwater Photographer of the Year." Others have been: 1957—Jacques Cousteau; 1958—Lamar Boren; 1959—Dr. Hans Hass. The 1960-61 winner is Marden.

Contest chairman Kennedy expects about 200 entries for the exhibitions. One gold medal and six bronze medals will be awarded in each division.

UNDERWATER FILM FESTIVAL TICKET BLANK REMEMBER! THIS IS A FILM FESTIVAL. THE SHOW IS COMPLETELY DIFFERENT EACH OF THE TWO NIGHTS.

Checks and money orders for tickets may be made payable to:

UNDERWATER FILM FESTIVAL, INC.

1147 Montecito Dr. Los Angeles, Calif.

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SKIN DIVER—December 1960

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Film Service Listings

Due to the constant demand of readers, "Skin Diver Magazine" would like to com-pile a list of films available to clubs and moups on either a rental or no-charge basis. Since they will be used for both entertain-ment and education, the films may be on any diving subject.

diving subject.
Anyone having films available can be listed by writing "Skin Diver Magazine," Lynwood, California. The completed list will be published in a future issue.



Americo Santarelli, 35, a Brizilian constructor and owner of a pizza restaurant at Copacabana, Rio De Janeiro, set a new world diving record of 43 meters (141.04 feet). This was accomplished in the vicinity of Rasa Island in Rio De Janeiro. Prior to his dive, the world record was held by two Italians who dived to a depth of 41 meters on a few different occasions. Santarelli began this sport at the age of 30 as a spear fisherman. Being in the very best of health, he dived many times for periods of one minute 26 seconds and showed no symptoms of exhaustion. Upon his first atempt, he returned to the surface with the 43 depth marker, but showing his great sportsmanship, he requested to dive again as he found the chain lying on the bottom.

Once again he dived at a deeper spot where there would be no doubt of his record.

Photo shows the moment of Santarelli's return to the surface in the presence of a group of Navy men and members of the Brazilian Skin Diving Association. He holds he marker in his hand.



Divers Assist At **Boston Plane Crash**

On October 4, 1960, an Eastern Airlines Electra carrying 72 passengers crashed into the shallow waters of Boston harbor shortly after take-off. Immediately a call went out wer radio and television for skin divers to aid in rescue and recovery.

According to Bob Cahill of New England Divers, Inc., over 600 volunteer divers reported to the scene. Confusion reigned until Jim Cahill, noted east coast diver, organized teams led by himself, Frank Sanger and Mike O'Neil of the Boston Sea Rovers. Recovery of victims, sixty-one in all, proceeded smoothly from the broken fuselage which had settled to a depth of twenty feet.

Harold Jillson, president of the Massa-usetts Council of Diving Clubs, has expressed deep appreciation to members of his council who made up a substantial num-ber of the volunteers. New Ways-**New Instructors**

Even for those who are the most rugged and really know their stuff, the piling on of tests and classes for two days solid as is crammed into National YMCA Certification Institutes (for SSD instructors, of course, is a considerable grind. Tension is built to a tremendous height; aspirants for National Instructors' Certifications sometimes find themselves not even caring whether they pass, by time they reach the stiff written exam.

The Aquanauts, resident scuba club of High Ridge YMCA in Chicago, haven't moaned about Instructor Institute methods, these "Y" divers have acted. So it is by reason of their intercession with the Illinois Area Aquatic Commissioner for YMCA's, Mr. Ron Zenke, that High Ridge has developed its own solution for taking off perhaps no more than a smidgeon of the pressure from national certification of scuba in-

structors.

So here's a brand new approach to National YMCA Skin & Scuba Divers Instructors' Institutes as begun November 18 at High Ridge "Y," 2424 W. Touhy Ave., in Chicago. Out of 12 Friday evening sessioned from 8 to 10 p.m., devoted to theory and testing, prospective graduate instructors must attend a minimum 10 of these classes. All three of the Sunday sessions must be attended for accreditation from this course. Starting at 2 p.m., Sundays will be given over to practical water skills in the pool

Further scheduled dates are as follows: Dec. 2-9-16-30, Jan. 6-13-20-27, Feb. 3-10-17-19-24-26, March 5. This takes a full 30

hours to hurdle!

The course is being conducted by Richard Malpass, Senior Nationally Certified SSD Instructor to High Ridge YMCA and ex-pert diver-consultant to the Aquanauts. Dick is also a certified instructor for the Illinois Council, on that organization's board of directors. Dick will be assisted by IC President Ray Hoglund, along with other nationally certified and veteran diverinstructors. For full details, write the High Ridge YMCA or telephone AMbassador 2-8300.

Artificial Reefs Are Being Built Along Southern Coast

Construction of three new artificial reefs began recently along Southern California's coast. The new reefs are designed to im-

prove ocean sport fishing.

They will be made up of huge rocks, hol-They will be made up of huge rocks, hollow blocks of concrete, old streetcars and old auto bodies, and will be placed offshore from Hermosa Beach, Santa Monica and Malibu, respectively. They are going on flat, sandy bottom where diving surveys have indicated an almost total lack of fish. The reefs are a part of the Department of Fish and Game's ocean fish habitat development program and are being financed by Wildlife Conservation Board funds.

Other artificial reefs financed by Dingall-Johnson federal aid funds and previously placed off Palos Verdes Paradise Cove already have attracted good populations of

game fish.

Each of the three new reefs will be composed of four separate sections spaced ap-proximately 150 feet apart to determine which of the four materials used attracts the most fish and generally proves the most suitable. Each reef will be made up of 300 tons of rock, 44 hollow blocks of concrete (eight feet by five feet by two and one half feet), 14 auto bodies and one streetcar. From Outdoor California.

Massachusetts **Endorses Divers** Flag

What do the various states think about the Divers Flag? Do they recognize it of-ficially? And if they do, what do they do about this recognition? Do they have any suggestions to divers to help themselves and boatsmen?

Massachusetts Boating Commissoner Wilton Vaugh, who has been a good friend of the Massachusetts Council of Diving Clubs,

offers these answers on behalf of his state. The Commonwealth of Massachusetts officially recognizes the Divers Flag and officially recognizes the Divers riag and states this fact in a regulation set forth by Vaugh. Recognition of the flag followed a campaign by Massachusetts Council President Harold Jillson, and Council members Gerry Tierney, Jim Cahill and Rick Vahan.

Vaugh has repeatedly urged boaters to watch for the flag and steer clear of it. And he has explained that divers may be some distance from the flag so boaters should proceed with caution and watch for divers' bubbles when in a diving area.

He has two suggestions he offers as a yachtsmen and non-diver:

—Don't fly the Divers Flag from a boat unless divers are actually in the water from the boat. To fly it at other times, Vaugh said, just confuses yachtsmen.

If flying a flag from a float, use a long staff so the flag will be high enough above the water for easy observation from boats. Some yachtsmen have complained they don't see the flags until they are right on them because they are so low on the water. Visibility is especially hampered when there is a chop or swell in the sea, he said.



Wolfgang Bayer

Austrian underwater photographer Wolfgang Bayer has now moved his residence and headquarters to the Southern California area. Bayer is now 25 years old and started his underwater photographic ca-reer when he was 15. Most recently he has been making pictures and working in the St. Clair Shores and Detroit, Michigan, area . . . and before his move to the United States operated throughout Austria, Germany, Italy, Yugoslavia, Greece and Africa. He has also led five major undersea expeditions to the Red Sea, African coastlines and the island of Stromboli.



(Would you like a diving Pen Pal? Send in your name, age and address and we'll print it in the Junior Fin Fans column. Write to: Junior Fin Fans Underwater Mailbox, c/o Skin Diver Magazine, Lynwood, California.)

Best Wishes for a Very Merry and Marine Christmas!

Here are some Christmas craft ideas for items that are easy and inexpensive to make. Friends will enjoy receiving seashell gifts from their favorite skin diver-YOU-so why not dive in and get started right away.

FESTIVE SERVING DISH

You'll need:

One 12 oz. box of plastic crystletts Metal container to use as mold.

Aluminum pans or travs are fine. Small seashells, beads and glitter.

Sprinkle crystletts in pan and pat in place. Arrange seashells and beads on top of first layer. Add second layer of crystletts on top of shells.

Melt in oven set at 350 until plastic is smooth and transparent. Allow to cool slowly. Smooth edges by holding dish under cold water and then sanding carefully.

MERMAID GLAMOUR PINS

You'll need:

Large brass hairpins

Transparent, quick drying glue

Small shells and sequins. Glue one larger shell on brass hairpin. Arrange small shells and sequins inside larger shell. Wear pins in clust-

SEA FERN STATIONERY:

You'll need:

ers of 3 or 4.

Dried sea fern (or any lacy marine

Transparent, quick drying glue

Plain stationery

Sequins or tiny shells

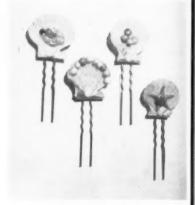
Place sea fern in layer of wax paper and press between pages of a book for 24 hours. Glue a small arrangement of sea fern in upper corner of stationery. Add a few tiny colored shells or sequins. Before wrapping, protect the arrangement by a piece of

JUNIOR DIVERS! DON'T FORGET TO MAIL YOUR CONTEST ENTRIES BEFORE DECEMBER 15TH

If you're 17 years of age or under, just complete this sentence in 25 additional words or less, "The subject I would like to read about in the Junior Fin Fans is Judging will be based on sincerity

Junior Fin Fans Contest c/o SKIN DIVER MAGAZINE LYNWOOD, CALIF.

Mermaid glamour pins.



wax paper cut to the size of the sta-

SHELL LAMPS

You'll need:

1 large shell

1 plastic boat

Small shells or coral

5 to 10 lbs. of plaster of paris

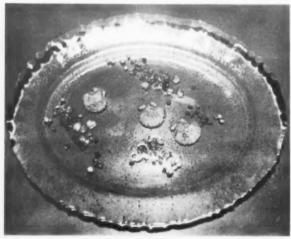
1 or 2 seven watt bulbs

1 or 2 sockets—buy the Christmas bulb size that clip onto wire to make automatic contact.

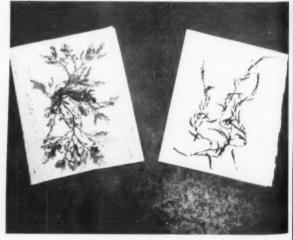
6 feet of wire

1 plug

1 piece of 1/4 to 1/2 inch plywood



Festive serving dish.



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Shell lamp

Plan your lamp as small or large as you wish. Cut the plywood base in a free form. Cut felt to fit base and glue, or use faucet washers. Connect sockets in parallel and put plug on end of six foot wire. Check all lights and make sure they work. Disconnect plug before you begin work on lamp.

Assemble the materials and make sure you understand the following steps. After the plaster is mixed, YOU WILL NOT HAVE TIME TO READ THEM AGAIN.

- 1. Mix plaster to creamy consistency.
- Put lights on board and cover with plaster. Be sure no wet plaster enters sockets.

- 3. Cover rest of board with plaster.
- Put large shell near back of the board, deep in the plaster and prop in place. Large shell must be supported until plaster dries.
- 5. Put boat about 3 to 5 inches from large shell and sink in plaster.
- Surround lights with shell, but make sure you can remove light bulbs.
- 7. Arrange remaining shell and coral on base while plaster is still wet.
- 8. Let dry overnight.
- When dry, paint with water colors, oil paint, food coloring or flower dye.

JUNIOR UNDERWATER MAILBOX

... I will be coming to Miami Beach around December 18. I would be grateful if someone around my age would write to me and could meet me while I'll be there and go diving or give me information. I would like a diving Pen Pal very much.

Ginger Wilson Age 14 1305 Tyson Ave. Philadelphia, Pa.

Here is a list of Juniors who would like diving Pen Pals. If you would like your name printed, just send your name, address and age to: Junior Fin Fans Underwater Mailbox, c/o Skin Diver Magazine, Lynwood, Calif.

wood, Calif.
Steven Waterman Age 14
So. Thomaston, Maine
Richard Bolavender Age 16
72 Bliss Road
New Britain, Conn.
Jack Roberts Age 16
1309 Summit Drive
New Westminster
British Columbia, Canada
Bob Leopold Age 12
108 Valley Road

Roselle Park, New Jersey

Sue Greenhalsh Age 18 Reeves Hall, Cotley College Nevada, Mo. Robert Howard Age 13 3 Holbrook Drive Stamford, Conn. Jim McCurdy Age 14 17121 Greenbay Lansing, Ill. Gary West 2340 Ceasar Way So. St. Petersburg, Florida Carl Franz Age 16 5728 180th S. W. Lynwood, Washington Lee McKusick . Age 13 226 C Ramona Ave Monterey Park, Calif. Larry Erkie Age 14 23507 Catskill Ave. Wilmington, Calif. Don Kritzer Age 16 3167 Ampere Ave. Box 65, New York, N. Y. Tony Merklin, Jr. Age 14 5926 Crane Circle St. Louis 9, Mo. Larry McKee Age 17 707 East Walton Ave. Altoona, Pa.

UNDERWATER CHANNEL SWIM

(Continued from Page 31)

up, they were marked accordingly, sent across to the compressor-carrying boat, filled with air, remarked as full, and sent back.

Any complacency that existed on this beautiful, sunny day was shockingly shattered at 9:30 when she came up, protesting that she had no air, and the operation was at an end.

What was the explanation? To this day there has been none reported.

"It was not faulty equipment," said Rockett, "but a fault in the technical conduct of this operation."

Somehow, an empty tank had been left with the full ones.

Regardless — history had been made. For even if the girl had covered only a half a mile underwater — and she actually, according to Skipper Bert Green, logged between six and seven, no one had ever done this before.

Undaunted, Jane made her second attempt to conquer the channel on a cold Monday morning, September 19. Conditions were poor but soon the tides would make further crossings impossible until next year. Full of the warm spirit that endeared her to everyone she met, Jane entered the water under darkening skies.

But, after fourteen hours, she was ordered from the water. The tides had turned and the "Fair Chance" was making no progress as it neared the English coast. Rough seas had almost halted its forward progress, support divers were exhausted or injured, only Jane wanted to continue. But is was estimated that it would take another sixteen hours to navigate the last eight miles so, heartbroken she was ordered up.

Channel swimming was at an end for the year.

"But I'll be back for another attempt in 1961," Jane promised.

The pretty little blonde with the spirit of a bulldog probably will.



UNDERWATER ENDURANCE

(Continued from Page 41) shortage of pure air occurring. Twelve safety divers will be available at all times with one of them constantly in the water with the contestants. Their duties will be to change air tanks, provide the competitors with nourishment and watch them carefully for signs of trouble. Three doctors who are competent divers themselves will be on duty, each of them working eight hour shifts and constantly checking on the physical condition of the divers.

First prize will be \$2000, second \$1000 and third \$500. All contestants who stay underwater for a period of 48 hours or more will receive a complete diving outfit valued at \$350.

One radio station will be broadcasting direct from the tank 24 hours a day, reporting on condition of divers and any unusual events surrounding the record attempt. Before the contest starts both TV and radio will interview the contestants, describing equipment and getting personal reactions.

It is felt that the contest will be a major factor in increasing attendance at the annual Sportsman's Show, with a total of over three hundred thousand visitors anticipated.

To further maintain spectator interest during the length of the contest an underwater show will be conduct-ed four times daily. This will include an underwater ballet plus many other evecatching exhibitions.

It is hoped that the tank and underwater show can make a cross country tour after its engagement at the Sportsman's Show.

Australian National Championships Slated

The Australian National Skin Diving and Spearfishing Championships will be held December 26, 1960, through January 4, 1961, on Phillip Island, Victoria,

Opening of the camp site on the Island will begin on December 26, with registration and a delegates meeting the following day. Competition will begin the 28th with the open pairs competition.

The first day of the open scuba championships will be on December 29. Other competition the 29th will be the junior singles and a shell collecting contest. The open team meet will be held on the 30th. Slated for the 31st are the women's singles, mixed pairs and the second day of the open scuba contest. Sunday, January 1 has no competition scheduled. The open singles will be on January 2. The final day of the open scuba event will be January 3. The third is also being held as an alternate day for any postponed events.

The final day of the championships will feature presentation of awards and a barbecue. Additional information can be obtained from Andris Lidums, federal overseas liaison officer, U.S.F.A. of Australia. 10 View St., Burnside, Adelaide, South Australia. *



Region No. 2 of the M.S.D.C. is starting in full swing-Jim Campbell of the Warren Divers and Jack Howard of the Blue Water Fathom Finders have capably organized this newest of our regions. As witnessed in their Competition and newly formed newsletter, we feel that Region No. 2 should be a welcome addition to the other regions.

Congratulations are in order for the Viking Diving Club of River Rouge and the Sea Kings Diving Club of Detroit who tied as Club of the Day at the recent Region No. 1 Competition. A flip of the coin decided the winner-better luck

next time, Sea Kings.

The club of the month for this month is the Midstate Diving Club. A newlyformed group operating from the State Capitol provide many interesting hours for diving personnel in the area. From all reports they have a very active group with emphasis placed on training and with emphasis placed on training and safety. The officers are: Rev. Luke Mc-Millian, president; Eric Thomas, vice-president; Patricia McCort, secretary; and Albert McCort, treasurer. Corres-pondence may be directed to: Patricia McCort, 516 N. Jennison, Lansing, Mi-

Keep in mind the Skin Divers Ball-M.S.D.C's only social event. Make plans to attend!

Gasco Scubaneers - Detroit-Reporter Pat Booth-The Scubaneers are pleased with their showing at the Region dive. Jim Keeney, Ray Angerilli, Gene Adamski and John Baran made up the fourman relay team that took third place; Jim Keeney and Bill Gehlert won first place in the buddy breathing event; and Ray Angerilli took third place in the compass

The Scubaneers held their Annual Banquet on November 4th at which time the club's "Diver of the Year" trophy was awarded to Ray Angerilli.

Sea Kings Diving Club of Detroit, Inc. — Reporter Pat Novak — The Sea Kings have had a full summer of diving this year. Each Sunday we held a dive and four weekends were spent diving in the northern part of the state. In the past month we have entered three inter-club dives. In our Region I dive Lois Atkin took first place for weight carrying, Pep Novak and Don Biggs took second for buddy breathing, and Tom Cunning-ham took third place for weight guessing. In the treasure hunt at Glen Lake Don Biggs again took second place and Karwin Blevins, third. In the angling contest Lois Kemler won first place for women.

Viking Diving Club-River Rouge-Reporter Felix Polakowski—The men and women of the Viking Diving Club of River Rouge celebrated the club's first

anniversary on September 14. The monument the club built and placed 105 feet below the surface of Maceday Lake, 32 miles from the club headquarters, has had 33 Viking visitors who have each dived to this monument and attached an identification tag bearing his name.

At the recent regional competition in

Pontiac Lake the club won eight individual trophies and the Club of the Day Trophy.

Labor Day found the Vikings in the area of Loon Lake where they made seven dives in six different lakes. An angling contest tested the skill of the members, and prizes were awarded to the

winners.

WASHINGTON **COUNCIL OF** SKIN DIVING **CLUBS**

By Bob Staunton 3903 Ferdinand St. Seattle 18, Washington

Bill High our president has appointed a three-man nominating committee made up of Gary Keffler, Floyd Bergault, and Frank Boling. In addition to selecting the most qualified candidates for the elective offices, they are also charged with the task of nominations for the Diver of The Year Award. The Everett Sounders have asked the council to accept a perpetual safety award, in the name of Bob Baker. This memorial is to be given yearly to the diver, who in the eyes of the council has done the most to promote safe diving here in Washington.

The Seattle Times featured a special article on Jerry Burr, in their column about women with unusual oc-cupations. They quoted Jerry as saying that diving as a vocation can be pro-fitable, fun and relaxing as well. Jerry certainly should know, she is recognized as one of the more well-known local women divers. Speaking of women divers, the Washington Council welcomed in a new club, The She Urchins presided over by Ann Duffy, who has worked long and hard to get together girls that are as interested in diving. They have the distinction of being the first all girl diving club in the council.

While on the subject of new clubs, Cowlitz Divers headed by Gary Gilhuly was warmly welcomed into the council to add to the growing list of or-ganized clubs. The members of this club are to be commended on banding together to promote proper instruction and

safer diving.

The three-sixteenth inch suit that Pete Manos brought with him from Los Angeles proved to be quite insufficient for our cooler waters. Your reporter had the pleasure of arranging part of Pete's vacation trip to Seattle. Pete's occupation with the city of Los Angeles is almost as exciting as some of his diving trips, he is attached to the ambulance division L.A. Police Dept. Pete's diving time though short was not uneventful, he was lucky enough to tie into a Ling and he found the area quite different

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be can make a return trip in the not too distant future.
Puget Sound Mudsharks — Reporter Paul J. Powers—This reporter is as proud as a new father. All those hours spent babysitting, encouraging and instructing the girls payed off big. Lorraine Keffler and my wife Mollie hit the top their and my whe Arolle int the top their first time out, taking first place in the first annual Boeing Seahorses Mermaid meet. Lorraine also took the largest fish. This final coup by our gals just about winds up the greatest competition year our club has ever seen.

from his own locale. We all hope that

he can make a return trip in the not

During 1960 our members entered 13 competitions. We took 11 first places, five seconds, three thirds and one fourth. Also nine largest fish trophies were taken by Mudsharks. There were a total of 47 dividual trophies presented to Mudshrks this year. Our state champion Mud-shark team placed sixth in the Nationals at Laguna. This record is one our club is proud of and will strive to better in



By JOHN J. McANIFF 359 Walcott Ave. Middletown, R. I.



Recently a visiting diver to Rhode Island's shores received an unexpected taste of the tricky tidal currents and climatic conditions for which this section of New England has become well known. This energetic fellow started out from the shore at Benton Point in Newport under a slightly overcast sky with two companions, all completely outfitted in scuba rigs. Within a short distance from shore he became separated from his two buddies and when he popped to the surface to get his bearings he could see nothing but deep gray fog in every direction. Following instinct as much as anything, he turned about in the water till he could place the direction of the pounding surf and started toward it. After a considerable distance he could faintly make out a slightly darker object in the fog and think-ing this must be the shoreline he moved closer to it only to discover that it was a huge rock formation barely above the high water at high tide. His report goes on to may that after an hour or two of calling for help in the nearly zero visibility he be-gan to think that he might have to spend the night there on the rock.

Now our temperature drops rather rap idly evenings at this time of year and 35 to 45 degree over night temperature is quite normal. Though clothed in a wet suit the chances are our friend would at the very least suffered a most uncomfortable night if the fortunes of a sports fisherman in a 38' pleasure craft had not brought him through the thick fog so much off his planned course that he nearly ran aground on the very rock

our diver friend was occupying.

The fisherman recognized the rock as the

well-known Seal Rock and realized that he was in dangerous shoal water and dared not come close enough to pick up the diver who by this time was too cold and tired to risk swimming out to the boat. The Newport group of the Coast Guard was notified by the fisherman and once again demonstrated their excellent proficiency under adverse conditions. The life boat crew picked its way through the extremely dangerous rocks and shoals off Brenton Point and braving the heavy surf and surge at Seal Rock managed to take the exhausted diver aboard and return him to shore.

Our visiting diver was far luckier than he realized for when he chose to head toward the sound of surf he was in reality heading straight for the open sea and had he not been able to find the little spot of rock which sets all alone except for a few other almost surface rocks he might well have been listed as another skin diving casualty. He was doubly fortunate in that he had left the Point with his companions and headed for the Brenton Reef area in an almost direct southerly bearing. The incoming tide in this location splits at the Bay entrance just inside the reef and in this instance helped to carry him far to the east of the place he had entered and thus brought him to the haven

of Seal Rock.

This is the second time in a year that a near serious accident was averted in this location by pure luck, both caused by the unexpected quick movement of fog into the bay. A word to the wise is usually sufficient but we will simply add that visitors to our fabulous underwater attractions are advised to take a second look at basic available information on our weather and tidal con-

The latest development in the story of the U-853, last German submarine sunk in World War II, has been the interment with full military honors in the island Cemetary here in Newport, of the remains of the one crew member retrieved this past summer by Burt Mason and his associates. All arrangements for the burial were handled by the German Consul at Boston, Gerhard Lang, and proper military honors were provided through the cooperation of the office of the Chief of Naval Operations and the Com-mander of the Naval Base at Newport, Captain Charles Cook.

In a press release given last week Mr. Lang stated that it is the desire of the German government that the remaining fifty odd crew members be allowed to stay where they are, undisturbed in 127 feet of water off the coast of Newport, along with their ship, the U-853 which was sunk by Coast Guard and Navy units on the last day of the European phase of the second World War.

In next month's column we will outline some of the plans of the Rhode Island Council for the forthcoming diving season. Till then good luck and good diving.

Illinois Divers Association

ROBERT T. BINGHAM P. O. Box 224 Franklin Park, III.

From the Land of Lincoln, comes word of a new state group, the IDA, the Illinois Divers Association.

Although an infant organization to the sport the cound numbers some of the areas finest old-timers in the diving world. Her constitution and by-laws are a compilation of the expressed desires of over 150 individuals. At the time of this writing, IDA can claim representation of 19 clubs, 4 states, many independents and this is just the beginning.

IDA's first water festival drew over 300 people to Dolton Quarry where eager contestants vied for victory and coveted prizes in a series of events that included a treasure hunt, snorkel and relay races, tug-owars, and the first of its kind the dryland flipper race. IDA's spearfishing contest was held among the rock reefs of our inland sea, Lake Michigan. IDA's events are open to the entire diving world, and not just members alone. Two non-members, team of Ed Jankowski and Felix Parkitney snorkeled to top honors, with a total weight of 128 pounds of fish caught. (They have pledged to join though) Richard Baginski's 22½-pounder was the largest fish, while Ed Jankowski won the grand trophy for the most total pounds. This event was featured on television, two major newspapers

and many community publications.

To the general public, IDA has launched an ambitious educational and recrea-tional campaign. The three-day performance of the newly organized show troup in a Chicago Park District Water Show

not only held the audience spellbound but brought words of praise from the Park Authorities. On the political field-letters have been mailed to city, state and national legislators to test their reaction on the opening of presently closed waters. Our unfavorable spearfishing legislation must be changed and even now decisive moves are under way here. Local officers have unlawfully barred legal craft from open federal waters merely because they contained divers.

Windy City Sea Lions-The Windy City Sea Lions have been active this diving season. One of the most memorable events was a club outing to Pentwater, Michigan. The visibility was great and we dived on the wreck of the Mench sunk in 35 feet

Chicago Depth Searchers - Reporter Dan Korbas-We have been concentrating on improving our diving ability. At present, the topic is learning diving theory coupled with underwater recovery and safety. Our program calls for a different member each week to give a talk to the group on some related subject.

The Merates — Reporter Frank Lockwood — The Mermates are planning a three-day outing to Minocqua, Wisconsin. On this trip, husbands, wives and kids will be included.

Hippo Campus—Reporter Bill Mossey We are in the process of building an air reciprocating booster cylinder. This, along with frequent club dives, has kept us all happily occupied.

Chicago Frogmen-Reporter John Rusniak— We have had several club dives and have salvaged two boats from Lake Michigan. One boat was a 42-foot motor sailer and the other was a 40-foot cabin cruiser.

The Isham "Y" Divers—Reporter Pat Delaney—We are still in the process of forming our club and haven't much to report as yet.

ICey NEWS

Illinois Council of Skin and Scuba Divers Inc.



By A. L. ANDERSON Lawson Y.M.C.A. 30 W. Chicago Ave. Chicago 10, III.

The IC's October 9, General Assembly at Lawson YMCA packed the big gym with 235 divers from 41 clubs. The festive occasion had no less than an 8x8 Divers Flag flown from the front of the building, and a

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Gig Harbor, Wash.

1960 SKIN DIVER BOUND VOLUME Place your order now for the past exciting 12 issues of SDM in attractive green bound book form. Our ninth annual bound volume will be available in limited quantities the first of the year. Send check or money order. \$10 SKIN DIVER MAGAZINE P. O. Box 111 Lynwood, California

SSD photo exhibit accenting URT operations graced the back of the gym, but the divers were particularly bent on the voting in of three new directors.

The election brought to the board: Dick Malpass, High Ridge Aquanauts; Art Reetz, Chi Aquas; Dan Wagner, Harvey Orcas. Per resignation of Dick Paterson, Jack Springer of the Illinois Athletic Club was appointed to finish out this term. Jack Glatt was named Underwater Society representative to the board, replacing Carl Hauber. Ray Hoglund was named president of the board of directors, to retain title of chairman. Bob Henn of the Harvey Orcas is the new vice-president, Dick Malpass has been named to the post of corresponding secretary and may be addressed at the High Ridge YMCA, 2424 W. Touhy Ave., Chicago 45, Ill. Bob Levin replaces Dan Wagner as Captain of URT.

The IC's board of directors wishes to thank the 20 Fathom Club for hosting this assembly. Particular thanks to the club's president, Jim Minor, and to Leo Darwit who had only one intermission for "The Silent World" so that some pictures could be snapped of guests who had to leave.

Correction on dates set for Divers Certification. To avoid conflicting with the Y's indoor competition on Jan. 15, Divers Certification dates have been set ahead to Jan. 22 and 29 respectively. Note that you must complete Basic on the 22nd to qualify for Expert on the 29th.

George Vourvoulias, Chairman of the

George Vourvoulias, Chairman of the Diver of the Year Committee, will release full information on the rules, this month. The first time such a committee has fallen the lot of a club rather than IC board mem-

Murky Lurkers—Reporter Bob Grassl—Neil Birdsall and Ron Gorks report that though John Tesch's float boats are fine to dive from, you had best be sure the weight is well distributed over entire craft. In a 135 ft. hole at Geneva, they found some volcano-like encrustations which Neil believes to be chemical deposits from underwater springs.

Lemont Quary provided the setting for a family picnic-spearfishing dive recently. Unfortunately the changing attitude of the local regulating bodies make it an adventure just getting the OK to dive here. JoAnne Zahnen replaces Bob Grassl as secretary.

The Lake County Divers will have a Christmas party and Water Show for the Lake Bluff Orphanage, festivities at the Lake Forest Academy Pool. Watch for date and details.

Windy Fins — Reporter Don Kern— This year's annual (the 6th) Florida

diving vacation was enjoyed b eight of our membership. Our drop-of Motel near Islamorada and we dived from Capt. High Brown's Reef Corsair. With cameras, we dived on Hen Chicken, Big and Little Conch and Mo. lasses Reefs; though visibility was general ly excellent, the very best was at Molasses Reef. Super Anscochrome film with a CC3OR color correcting filter gave excellent results at depths to 25 ft., with an exposure of f 5.6 at 1/100th sec. One roll of Plus X B&W film with a Y1 yellow filter at same exposure as the Anscochrom netted some fine B&W negatives. Fault processing spoiled the High Speed Ektochrome single roll shot. We're at home now, and already figuring out how to get even better pix next trip, next yea

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Harvey Orcas—Reporter Scottie Ricker—Congrats to the IC on its highly successful treasure hunt and skin diving meet. Despite the intermittent showers and two of the Orcas getting lost on the way to the Racine Quarry, our club enjoyed the hunt and competition, and that regardless of it being a day on which we could neither win nor find anything.

Our regular fall-winter program of SSD instruction at Harvey YMCA began September 26. Bob Henn, our club presdent and National YMCA Certified Instructor, is the head instructor and has a number of the club members assisting in the program.

in the program.

North Shore Deep Water Divers—Re
porter Lil Ramsden—New officers of the
club are: Lowell Champion, president;
Donald Hayes, vice-president; Norman
Ramsden, treasurer; Lillian Ramsden,
secretary.

Our new meeting place is at 2650 N Sawyer, Chicago 47. All correspondence and information concerning the club should be directed to the secretary at this address.

Silent Explores—Reporter Val Williams—We, the Gary, Indiana, division of the IC, are planning to have an open hour Saturday, January 28, 1961, at 7 p.m. is the Gary YMCA. There will be a very special guest speaker and a showing of "Silent World."

A few of the club members, Jack Klauck, Don Hill and Val Williams tried a night dive at Racine Quarry recently. It was down to 58 ft. by moonlight before these boys got to turning on their underwater lights. A different and not so much thrilling as chilling experience when it came to changing out of their wet suits in the moonlight frost.

Carl Hauber, president of the Underwater Society of America, congratulates election winners at Illinois Council's general assembly, Don Wagner, Dick Malpass and Art Reetz. Photo by William Burgin.



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Chicago Submariners - Reporter Bud Johansen—At IDA's October 2 meet at Johansen—At 1DA's October 2 meet at Racine Aqualand, the Chicago Submarin-ers turned out in force and in a field of well over a hundred participants, here's how the Submariners made out: Men's morkel race, Don Spiering took first; women's snorkel race it was Nancy Narbut the winnah; and the Submariner team me winnan; and the submariner team pulled to a draw in the tug-o-war. Mike Lehor came in second in the dry land fipper race; Dick Hammond won a radar light in the treasure hunt.

Atlantis Divers-Reporter Dick Sindelar Adantis Divers—Reporter Dick Sindelar

Group transportation via a low flying
bus gave 36 of our club a good 2½ days'
diving at Washington Island. We dived
off wrecks, onto wrecks, recovered several
anchors suitable for the Atlantis Divers'
Museum of Marine Artifacts. Our safety
director, Don Gorence, has evolved a
strong 10 Rule Safety Program which
is already operative. is already operative.

Your reporter attended the 4th Annual Southern Open Skin Diving Derby and had a diving good time. We promise to bring more divers down next year.

Metro Chicago YMCA—Don Kern and Clancy Asbach—Nineteen delegates and alternates of nine "Y" scuba clubs held a post-mortem of the Lake Geneva Meet, in this committee's September meeting. And with the October meeting, discussion and settling of rules to govern the indoor competition at Austin on Jan. 15, 1961, usurped most of our time.

Rolf Halvorsen of the Atlants Divers, Chairman of the Instruction Sub-Committee, announced imminent release of information as to which Y's and member clubs are teaching SSD courses and scheduled starting dates.

One does not have to take the Cuerton physical fitness test to successfully pass a YMCA SSD course. However, for mational recognition, the student must make 53 percent on the physical fitness. The Metro Chicago YMCA Instruc-

tor Certification Institute of Oct. 14-15-16, at West Suburban "Y", with Dr. Edward Laphier on the agenda, attracted 32 instructors to try for certification. A feature of this Institute was the physical fitness pre-testing of the aspirants at their own respective Y's, signed statements to this effect by physical directors being accepted by the certification commit-

SOUTHEAST COUNCIL OF SKIN DIVING CLUBS

By BUD COX P. O. Box 42543 Miami, Florida

SEC BLASTS OFF

The Southwest Council launched the new year early by installation of 1961 officers and announcement that funds for the '61 national spearfishing tournament have been national spearinshing tournament have been secured. The new officers include president Frank Shulski (Reef Divers), vice-president Kenny Simpson (Black Fins), treasurer Don Nelson (Sea Devils), and secretary Bud Cox (Makos.)

At this writing the SEC is preparing a formal bid for the 1961 spearfishing cham-

pionship tournament and the officers hope to stage a contest comparable to the 1960 Long Beach competition. The Council, through the efforts of Crawford Parker of the City of Miami Convention Bureau and Mike Coffman of the Everglades Hotel, the council has received pledges totaling \$1,725 from the Everglades and McAllister Hotels. A minimum bid of \$2,000 is required and it is anticipated it will be over-subscribed be-fore the holiday season. Parker and Coff-man accomplished their solicitations in the amazingly short time of two weeks.

The Tidemen launched a recompression chamber fund drive in the early months of 1960 and have now offered to share the program with the entire Southeast Council. Unanimous vote of the council placed the program under council sponsorship and Tidemen members Jack Crevalle and John and June Trost were continued on the committee.

As the holiday season approaches the officers and members of the Southeast Council would like to wish divers everywhere a Merry Christmas and a wet New Year.

Coming Next Month: Complete details, Recompression Drive and Key Largo Coral Reef Preserve, Rules and Regulations.

CONNECTICUT COUNCIL OF DIVING CLUBS

LEONARD GREEN P. O. Box 1446 New Haven, Conn.

Everyone is talking about the biggest council affair of the year, Council Trophy dinner dance on November 26 at the Garden Grove Caterers, Manchester. One of the finest bands in the area provided music for dancing and Council awards for the year were presented, plus a few guest speakers to round out the night.

Thanks to the hard work of Frank and Janet White the Council Digest is really beginning to look like a news letter and is always full of information that is helpful to all. Anything that the individual clubs have in the way of news will be appreciated and will be printed as soon as it is possible. Those club members who do not receive a copy of the news letter can do so by submitting an addressograph plate with their name, address, city and state together with 50c to the corresponding secretary.

Tickets are now available for the first showing of Captain Cousteau's new 1960 underwater expedition sponsored by the Sea Devils. The show will take place on January 11th at 8:30 p.m. at the Bushnell Memorial Auditorium, Hartford, Conn. Tickets can be purchased at your local diving shop or by writing Will Jacobs of the Sea Devils. The price of the tickets are: children (under 12) 75c; adults 1.75; reserved section, \$2.50.

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AND DO IT THE EASY WAY WITH SKI N' DIVE'S NITE-LITE and FARMER JOHN WET SUIT



TURNS NIGHT INTO DAY UNDERWATER. Now you can see all the creepy things that have been scaring you underwater at night-even down to 250 ft., if you are inclined to go that deep. You can stay down 32 hours before changing batteries.



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Bellflower, California

ME 4-1221 No. 2 1900 Westwood Blvd. GR 8-0609 Los Angeles 24, California





By Sonny Logan 3772 Matador Dr. Dallas 20, Texas

I would like to take this opportunity to send out seasons greetings to the people all over the world who have written in to me about diving in our Southwest area. It is most gratifying to know about other people in other countries with such a common interest in our sport that they will sit down and write for information. I am always happy to hear from them. I do not know how to say it in any other language but to Trondhiem, Norway; Barcelona, Venezuela; Havana, Cuba; Mexico City; Marseille, France; San Juan, Puerto Rico; Beirut, Lebanon, and to many cities in the United States, I send

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WRITE 514 S. BAYSHORE, SAN MATEO, CALIF.

good wishes for a bigger and better diving season, where ever you are.

season, where ever you are.

Our Buffalo Rodeo at Lake Travis
Oct. 2 was a sucess even though there
was a shortage of fish. Largest fish of the
day was taken by Bill Sentell of the ArkLa-Tex Divers, a 10.9 carp., Bob Lupton
of the Inland Divers of Ft. Worth, with
a 8.6 carp., Jack Church also of the
Inland Divers with a 8.5 carp. In the
scuba team division, the team of Bob
Lupton, Ray Meisenhalder and Wallace
Crutcher came in first with 42.14 lbs.
second place team was Bill Sentell and
Dan Milner of the Ark-La-Tex Divers
with 17.8 lbs. In the skin divers division,
Don Prince of the Austin Underwater
Society took top honors with Allen Wenger
a close second. Their team with Harvey
Shell also took first in total weight with
the team of Les Hart and Sonny Logan
second.

With only one more contest to go this season, the championship points are about at their peak. The "Gar Rodeo" at Lake Bistineau on Nov. 27 was the last council sanctioned contest of the year. This has been our first season to organize contests and award championships and we have learned a lot of what to do and what not to do.

George Youmans and 38 divers from the Houston area have conducted "Operation Flower Picking," some 120 miles off the Texas coast. The U.S. Navy Destroyer S.S. Wren in conjunction with the Houston Museum of Natural History, took the divers to the area, where some 75 feet deep there is a brilliant fairyland of coral and sponge growths. Dr. T.E. Pulley, the museum director, plans to study the specimens and to work out a display in the museum using the natural coral and sponges as a part of it. The water in this area is usually much deeper but here there are two underwater mountains reaching to within 75 feet of the surface. They are covered with brilliant coral and sponge growths and surrounded by many types of fish, including large barracuda. The operation was a success and all the divers had a good dive.

A new club came into our council this month, the Houston Aqua Masters with John A. Newland as president. Welcome aboard.

There is no other diving activity planned by the council during the month of December. However, after the first of the year it starts all over again. Many plans are already in the making to have contests. The first thing will be our awards

banquet where we will pass out the yearly championship trophies and pat the winner on the back. In the event of any ties for any of the first four positions there will be a time contest. Time, place and date are still open.

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Merry Christmas to everyone, best wishes for a new and more prosperous diving year.

Question: Have read that there are octopi with tentacles 75 feet in length, lithis true? Seymour Gate Pond, Malaga, Spain.

Answer: The largest octopus ever recorded was Octopus hongkongensis, a specimen of which was reported by Dall to be 32 feet across the tentacles. The body, however, was only 18 inches long. The largest giant squid measured 54 feet in length, with tentacles about 40 feet long. Undoubtedly giant squid, Architeuthis, attain a larger size and several have been reported up to about 65 feet in length Squid tentacles 30 to 40 feet in length have been found in the stomachs of whales "Sea Secrets"

OF UNDERWATER DIVING CLUBS

By George A. Welman Jr.

P.O. Box 13332 New Orleans 25, La.

Louisiana can rightfully say that 1960 has been THE year for it's divers. It started off with successful two days of Cousteau lectures in conjunction with the charter meeting of the Louisiana Council and the First Annual New Orlean Scuba Diving Contest Banquet. Then came a series of competitions, all of which were successful. The Grand Isle Tarpon Rodeo; Gulfport, Mississippi Deep Sea Rodeo; New Orleans Chamber of Commerce Rodeo; New Orleans Grand Isle Scuba Divers International; Lake Ponchartain Diving Rodeo; New Iberia Fishing Rodeo, Louisiana Council Gravel Pit Treasure Hunt and the Gar Rodeo in Shreveport. Isn't that enough to keep our divers busy? Of course the New Orleans Scuba Diving Contest runs all year



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long, ending December 31. The results will be announced in the March issue of SDM.

The Louisiana Council will have it's first annual banquet on January 14, 1961, in New Orleans. There will be a general meeting that afternoon with election of officers for 1961.

We did ourselves proud at the Underwater Society of America First Annual Convention in Houston. We had the largest representation of any council attending: our Director, Jay Albeanese, was named Special Assistant to the President of the Society; Dick Alba, President of the Dixie Divers, was named Vice-President in charge of Scuba Competitions for the Society and as noted in previous editions of SDM, we presented four coveted NOGI Awards to outstanding divers in the nation.

The biggest prize of all won by the Louisiana Council was the Convention for 1961 to be held in New Orleans on August 25, 26 and 27, 1961. The National Scuba Triathlon Finals will be held here August 23, 24 and 25 just prior to the convention. Start making your plans now. There will be a feature article in the January issue of SDM telling all about our wonderful city and state.

After the Convention, we had the honor of having for diving buddies in our

After the Convention, we had the honor of having for diving buddies in our waters; Carl Hauber, President of the Society; Mel Lillis, Inter Council Coordinator for the Society and Dort Bigg, Judge Advocate to the Northeast Coun-

Sea Tigers of West Jefferson—Reporter Mitchel Cancienne—Since Lake Ponchartrain has cleared up, the topic of conversation at the Sea Tigers meetings invariably ends up being sheepshead. Little sheepsheads, big sheepshead (those that got away) baked sheepshead, fried sheepshead and last but not least, according to the latest trend, barbequed sheepshead. I've tried them all and personally I prefer the latter; beats hamburgers any day.

If the jabber is not about cating the little convicts, its about hunting techniques, of which there are no less than three advocated. One of our members went diving alone and claims he shot a sheepshead just to have someone to swim with! Maybe we're becoming just a little too attached to these little fellows.

Bajaos Skin Diving Club — Reporter Burnie Dodge—The Bajaos have had another successful diving year. As of this writing, we are leading in the New Orleans Scuba Diving Contest and Jay Albeanese, our Pesident, is King Spearfisherman with Pete Billac not far behind.

George Welman, Vice-President of the Louisiana Council has moved to New Orleans from Baton Rouge and is now a member of the Bajaos. Now we have the President, Vice-President and Director of the Louisiana Council in our club. Elections are coming up, both in the Council and the club. We also welcome Jack Stinson, Leon Connelly, Harold Brouphy, Bip Livaudais and Roy Todd as new members this past summer.

Diving has been just about perfect this year. The gulf has had visibility of 100 feet and temperature of 70 degrees. Lake Ponchartain, though only 15 feet deep as an average, has had at least 15 feet visibility. Fish, you just can't imagine! It has been wonderful. Record fish have been shot by Pete Billac with a 220 lb. warsaw grouper and Dan Nelson has a 76 lb. amberjack. Fred Wust shot a 72 lb. shark to add to the record book.







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By DON C. KENLEY

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New divers, new clubs, new council-tember-clubs, all equal greater and member-clubs, all equal greater and harder work—but as the old philosopher says—"These are the kind of problems it's nice to have more of.'

All of us in Council take pleasure in welcoming the South Jersey Skin Diving Club into the MAUC. This club has been one of the most active in the area. Any unaffiliated divers, near Absecon, N.J., are invited to contact Ed Herbert of the South Jersey Skin Divers.

Council now has copies of the Diver Flag Posters available at no cost to MAUC clubs that request them. In addition, member clubs may also purchase Diver Flags and Underwater Society of America patches at considerable savings.

Council has offered and had its offer accepted by the Cape May, N.J., Charter Boat Captains Assoc. to help in the construction of an artificial reef off the coast of New Jersey. Permission for the reef's construction has been secured from the U.S. Army's Corps of Engineers. The reef will do a great deal to help restore bottom and reef fishing in this area. The bottom fish have almost been driven away entirely by commercial draggers that constantly work these waters and destroy bottom growth.

Another ambitious program is now under way and should be completed by early spring. At that time, Council hopes to make available to its members a complete listing of all diving sites and air refill stations within Council's boundries. Each club is invited to send complete data on all sites i.e. location, depth, visibility, and air refill stations in their area, to this writer for compilation.

The Second MAUC Annual Convention is well into the planning stage. Convention Chairman, Dave Stith, says it has all the earmarks of being an even greater success this year than before. More time will be given to the technical diving workshops that were a highlight of last year's convention. Tentative plans call for a date in late March of 1961 for the festivities.

It's not too early to begin thinking about the 1961-1962 elections that will be held in February. If you want a Council that will remain strong and grow-ing, it's your club's job to see that qualified and willing leaders are elected.

Clubs interested in affiliating with the MAUC and the Underwater Society invited to contact the author for complete information.



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MASSACHUSETTS COUNCIL OF DIVING CLUBS. INC

By RICK VAHAN

300 Harrison Ave., Boston 12, Mass.

The crash of an Eastern Airlines jetprop Electra into waters off Winthrop, Mass. saw Council members turing out in great numbers. Council President Harold Jillson with a Civil Defense Underwater Unit from the Gardner Skin Divers traveled more than 60 miles to aid in the post-plane crash operations. Jillson was credited with doing invaluable work aboard a Coast Guard buoy tender that served as a base for diving operations.

Practically all of the Council's clubs were represented at the plane crash scene as scores of divers—organized and unorganized-turned out in response to a radio appeal for divers after the big airliner flopped onto its back and smashed into the water on take-off from Boston's Logan International Airport for Philadel-phia, Charlotte, N.C. and Atlanta, Ga.

Gardner Skin Divers are hosts at the annual Council banquet scheduled for of the finest clubhouses in the state, is also one of the most active clubs in the Council. President of the club is Ray

Several months ago it was reported that Bill Golden's wife was expecting a baby momentarily.

Then no more reports were given on the situation. This is to assure everyone that Mrs. Golden came through, producing a Golden boy two days after the previous report was written.

Members of the Marblehead Underwater Group turned out in force for meeting with the town's selectmen when a newspaper story asked "Are skin divers thieves?" The story wrongly stated a meet-ing of the selectmen with town residents would discuss lobstering and anchor theft by divers. In reality the meeting was to discuss a set of regulations for boatsmen and divers using Marblehead Harbor. The harbor is one of the East Coast's major yatching centers and is also one of the most popular diving locations on the Massachusetts North Shore.

Attys. Gerry Tierney, Kim Valentine and Marty Kirkpatrick and a Boston University math prof, Bill Sellers, were among club members representing diving interests at the meeting.

Tierney, who is also judge advocate for the Council, was named chairman of a special committee by the selectmen. The committee's job is to set up regulations for divers and yachtsmen using the Harbor's waters.

With both water sports booming, the need for regulation was agreed on as a means of preventing accidents in the heavily traveled harbor watered.

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NEW YORK ...

Long Island Underwater Explorers -Copiague — Reporter Jerry Clarelli — On Saturday, September 3rd, Ray Griffith became the first man to swim the Long Island Sound underwater—a distance of 17 miles in 16 hours from Bridgeport, Conn., to Port Jefferson, L. I.

The plan to swim Long Island Sound was first born in Ray Griffith's head years ago. He finally put it before the club, the Long Island Underwater Explorers, of which he is president. Three men assisted him from the club, they were Jerry Clarelli, John Palmaro and Kenneth Rampone. We were fortunate that Stanley Booke of the Babylon Sports Center threw open his doors and gave us anything we needed, also Mac Snyder of Port Jefferson helped considerably with his experienced planning and equipment. The only setback was tanks. We were short tanks. Ray called U. S. Divers in Connecticut for their help. Upon hearing the plan they came through with twenty beautiful yellow tanks. Then borrowing tanks from members of the club and friends like the Suffolk Sub-Mariners, Healthways, we managed to get together 38 tanks.

The next thing needed was a boat. We then went to see Walter Kautz, owner and captain of the "Little Dipper" out of Lin-denhurst, L. I. He like the others was all for it, and was eager to be part of the ven-ture. Then to add spice to the sauce Ray Griffith called R. Stanton of the Underwater Electronics Corporation of Hartford, Conn., who agreed to lend us the "Under-Com system" that we used.

The men and material ready at Port Jef-ferson were loaded onto the "Little Dipper" and started for Bridgeport, Conn. We hit some foul weather, forcing us to stop for the night. We finally set out at 5:30 a.m. on Sept. 3rd. The weather was clear, water was calm, the day sunny. We had ideal conditions. Everything ran smoothly for the first three hours. Jerry Clarelli and Ken Rampone helped change tanks and feed Ray, while John Palmaro checked the pressure of the tanks, and kept a sharp lookout for sharks that have been sighted in Long Island waters during the past few weeks. This routine was rotated among the three men. The only bad incident was when an extra heavy two-tank pack was put on Ray and while he was hooking up his harness he began to sink to the bottom till Ken Rampone, coming back from the boat, spotted Ray going down and started after him. They both landed on the bottom in 120 feet of water. Taking off his weights and inflating his life-jacket he slowly came up to the 15-foot level with Ken's help. Ray was lost twice and several times he had cramps in his legs. As darkness set upon us Ray depended more upon the underwater light that was being towed by the lead boat. We finally climbed out onto the breakwater off Port Jefferson at 9:10 p.m., Saturday, Sept. 3rd.

Olean Divers Association-Reporter Robert Brown - Our club was formed over a year ago with four members. We grew from those four to fourteen active members. We set up a course to teach local firemen to dive and also teach at the local YMCA. Our instructor, Fred Evens, is an ex-Navy diver and well qualified to teach. The president is Dewayne E. Woodling, Robert L. Brown, secretary, and Clair Collins, divemaster.

Club divers helped in the recovery of two drowned fishermen at Honeyoe Lake. We drove seventy miles to the lake. We'd like to hear from other clubs in the area.

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Suffolk Marlins Inc. - Islip - Reporter Sue Romaine — The club is organizing a bowling team to help keep members to-gether during the winter. Secretary Sue Romaine has completed instructing a Red Cross lifesaving class at the Bay Way Beach and Cabana Club. Club members who en-rolled were Pete Mack, Tony De Stefano, Tony Mancaruso, Tom Licari and Lou Modica.

Ed Kuhne has designed and constructed an underwater camera case and has offered to help others build similar cases. For more information on the club write Sue Romaine, 6 Dogwood Ave., Bay Shore, N. Y.

CALIFORNIA ...

Underwater Photographic Society-Los Angeles—Reporter Karl Bathen—Elections and the UPS underwater Christmas party at Catalina will highlight the month of December. The busy month of January will begin with a national exhibition of movies, black and white prints and color slides on January 6 and 7 followed by the fourth Underwater Film Festival on January 20-21 at the Santa Monica Civic Auditorium.

George Cushman honored the Society with a second visit in November. His topic was "Developing a Movie Story." Mr. Cush-man, head of the movie division of the Photographic Society of America, judged an UPS 8mm and 16mm movie competition in September. At our October meeting George D. Ellis from Hollywood Cine Products spoke to the club on "Titling" of film.

Los Angeles Neptunes-Glendora-Reporter Vic Kondra—Recently the Los Angeles Neptunes made a trip to La Jolla cove for a diving expedition. Under normal conditions La Jolla is one fabulous place to dive. There is usually at least twenty-fivefoot visibility and often over forty. Today was to be a day of all days with outstanding visibility of about two feet. We found out why. During the night the city sewers had backed up and we were swimming in pol-luted swill. Well back to L.A.

Our next function was a dry meet at President Jack Percy's house. We had three excellent underwater movies. (Note: Clubs that need sound color movies, may contact the Los Angeles County and City Libraries.) During the meeting we planned our Cata lina trip. Fourteen members boarded a boat in San Pedro Harbor about six in the morning. We left promptly after the gear was

In about two and half hours we reached the north end of the island and went around it to the windward side. We found a secluded cove and dropped anchor. It was beautiful, clear and fresh as the springs in Florida. My spouse dropped her snorkel so I gallantly spiraled to the bottom. I could look up and see a beautiful mirrored surface, dotted only by the long dark hulk of the boat and my tiny wife looking down at me. I picked up the snorkel and a huge ray skittered out of the way. Looking more carefully I could see at least a dozen rays, all varieties, half covered with sand lying over the bottom. After a short jaunt with my wife we were back aboard. The hunters were bringing in excellent catches of sheeps-head. Later we moved to two other spots. President Percy and myself got the only lobster for the day. Ed Kenney found a huge navy anchor. It weighed about a hundred pounds and looked like it had been in the water about fifty years. I also found an anchor, a fifteen pound North Hill with thirty feet of chain and about fifty feet of nylon line. The whole thing was in excellent shape.



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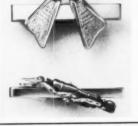
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FLORIDA ...

Broward County Archaeological Society Inc.-Hollywood-Reporter W. Battenfield Our active group had its official beginning in October, 1959 when a few individuals with a passion for archaeology sent our charter to the Florida Secretary of State. We have continued to progress since then under the efficient guidance of president Lorraine Henriquez, and because of hard work accomplished by mem. bers Wilma Williams, Pete Allen, Milt Wolfe, Helen Alperin and others.

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One of our main reasons for organizing was to collect, study and preserve relict and artifacts of Florida's early inhabitants, using disciplined excavation techniques. This material will be preserved until we reach our goal of obtaining a suitable museum in which to display our finds.

In South Florida Indian Mound excavations we have in many cases been "one jump ahead of the bulldozer" because of the current building boom in this area.

Material found in the "Kitchen Middens" or living area mounds of Tequesta Indians (around 700 AD) tells interesting tales. The various shells and animal bone gives us an idea of the menu of these early nomadic Indians. Most of the tools, weapons and ornaments of the Tequestas were cleverly fashioned of shell and bone because this area lacks usable rock and metals. Burial mound excavations here have given us visible evidence of tooth and bone disease suffered by these early Indians. Society members also uncovered complete skeletal remains of a dog buried at the feet of his Indian master.

My chief interest, because I have been diving for several years, lies in our marine archaeology work. Although we have been in operation on this phase of archaeology for only a year, we have made some significant discoveries.

Our first venture was the exploration of what appeared to be two ancient wrecks in shallow water adjoining one of the Indian mound sites. Artifacts recovered from a "Spanish Galleon" included such prizes as a flintlock pistol, workings of a large wheel lock gun, a gear, a belt buckle, ship's nails, spikes, and other unidentified cor-roded items. Identification of this ship is being attempted. A mammoth curved of iron was discovered nearby and hauled, laboriously, to shore with a rope by exhausted members. Subsequent investigations suggest that this was a ram-ming device from the bow of a British frigate. Excavation of the Indian Mound on the dune above revealed coral encrusted sections of the shipwreck and also ancient broken bottles, hand blown and possibly Spanish. How did these things get in the mound?

Plans for the coming months include detailed study of land areas near known wreck sites, and joining other divers in exploring local wrecks and noting their progress. Data concerning proper excavation methods and preservation of finds will be collected.

OKLAHOMA ...

Bluegill Divers - Oklahoma City porter Louis Mutz — The annual diving derby of the Bluegill Divers Inc., and the Capital Hill Scuba Club was held in October at Lake Texhoma.

Trophies were won by Lonnie Selph, largest fish; Johnny Santos, second largest fish; J. J. Price and Louis Mutz, team aggregate number; Danny Gale and Lonnie Selph, aggregate weight, and Louis Mutz, smallest fish. The club trophy was won by the Bluegill Divers.

SKIN DIVER-December 1960

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MISSOURI ..

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Kansas City Frogman Club — Reporter
Mary Edith Lillis — The big tournaments
are over and convention excitement has died
away, however the club is settling down to
the serious business of winter planning. Plans for the Reunion and Awards dinner dance have our divers looking forward to the biggest social event of the season. At this time the new officers will be presented. The activity schedule and diving calendar The activity schedule and diving Calendar for the year are formulating. The members who enjoy a position on the Midwest Div-ing Council and their delegates will travel to Joplin, Mo., to coordinate these plans with other clubs in the Council. Particular stress on training teams for the National Triathalon Championships promises to bring

a top team from our club.

Diving at Table Rock Lake, swimming the Elk River and traveling to Lake Norfolk, Arkansas side, to compete with line fishermen has occupied our diving time. Classes in lifesaving, compass courses, underwater hunter safety, demonstration teams as well as ground schools, the Annual Sports Show, splash parties and other social functions indicated that the K.C. Frogmen have another active, fun-filled year ahead of them.

King Fins — West Monroe — Reporter Jack Echlin — We have had a busy three weeks on recovery and salvage work. Among the diving jobs were the recovery of six shotguns and a pistol from Lake Larto after a boat collision, recovery of two pair of glasses beat collision, recovery of two pair of glassic from Ouachita River, recovery of a shotgun from Macon Bayou, recovery of a 40 hp motor from Ouachita River, salvage of a 42-foot tugboat from Ouachita. We had to give upon a search of the Ouachita for a pair of false teeth and are planning more dives into Beout River to assist the Sheriff's Department recover money stolen from the Oak Ridge Bank.

OREGON by Laura L. Hales

A council for skin diving clubs has been established for the state of Oregon. Nominations for the first permanent officers will be held in November with elections taking place in December for the 1961 term. In the meantime, temporary officers are: president, Dick Wald (Portland); first vice-president, Clinton Blakely (Salem); second vice-president, Robert Holmes (Portland); secretary, Gail Williamson (Salem), and treasurer, Bill Van Arsdel (Corvallis).

Please address all letters pertaining to the Council to: Dick Wald, 7744 S.W. 49th St.,

Portland, Oregon.

Neil Dunmire, diver from Oregon City, will attempt to break the now existing skin diving depth record. In preparation for the dive he has dived to an official 120 feet! The record stands at 132 feet. Looks like Neil means business.

Stan Richards has designed and constructed an aquaplane to use in the high lakes. Made from a 4x8x½-inch sheet of plywood with observation window and antiroll keels, the souped-up paddle board does up to five miles an hour down to seventy feet. Stan built the diving planes independent of each other for easier handling. He is a member of the Willamette Valley Diving

Douglas Pelicans Skin Divers — Winston — Reporter Nick Kobernik — The Douglas Pelicans Skin Divers was formed under the direction of Roy Fisher who was elected president. We are proud of the achievements of the club in getting air into Roseburg as our nearest station was in Eugene, 70 miles away; in presenting a course in skin diving at the local swimming pool and also traveling many miles to instruct a group of Boy Scouts. Working with the local YMCA a course in adult skin diving will be held in January at the YMCA pool.

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	WIN DIVER December 1040	COMPRECED AIR	Continued on Next Page 50

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COMPRESSED AIR Continued on Next Page

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SKIN DIVER-December 1960



(Continued from Page 59)

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BOATING DIVERS

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BOATING SUGGESTION WINNER

Paul Flaherty Arlington 74, Mass.

Mr. Flaherty's suggestion . . . Coat hangers bent in the shape of the letter "S" will serve as inexpensive, outboard hangers for spear guns, cameras, etc., if the diver wishes to change gear from his anchored boat without climbing in and out. The wire hanger can be formed to the shape of the gunwale for more security.

ARIZONA SKIN DIVING COUNCIL

By Philip M. Haddock 569 W. Earli Dr. Scottsdale, Arizona

After considerable floundering around among the sands and cactus, the Arizona Skin Diving Council finally got under way with some very worthwhile targets. Following our successful banquet and convention in Phoenix in April, the Council met in Tucson in June for the purpose of selecting and approving a constitution and for the election of the Board of Directors. The Desert Dolphins and Desert Neptunes were capable hosts and the ratification meeting was a great success. Now, at last the Council is very happily sailing along under the leadership of Al Halliwell, supported by Dr. Ray Thomas, vice-chairman, Boris Inno-centi, Wes Wells, Bob Watmore, Bill Curtis and Phil Haddock, secretary and editor. Due to one transfer and one resignation we are, unfortunately, two members short on the Board; however, we hope to make up the deficit at our next meeting.

The Council hopes to have a film library so we will be able to lend slides and movies to member clubs on request. This project will be handled by Harry Summers of the Winslow Desert Divers. Bob McDannold of the Phoenix Department of Parks and Recreation is doing an excellent job of spearheading a basic training program for prospective skin divers. Ninety-two enrolled and are taking the course. That's a lot of tank-toters for this "arid" state. Another function the Council is undertaking is club guidance for newly formed skin diving clubs

Al Halliwell will be inaugurating an Underwater Hockey League. If you think swimming a couple of miles with full gear is tiring you should try this sport sometime. We'll have details on this "rest cure" a little later. There is a tentative outing planned January under the direction of Wes Wells.

By the time this news is tightly strapped into SDM the Council will have its patches. These will be obtainable to members through their respective clubs. The design will be incorporated from all those sent in by you talented craftsmen.

We just completed a successful Board of Directors meeting with numerous plans laid down for future development. A set of minimum diver qualifications will be established by the Council under which all divers in the state, belonging to Council Clubs, will be rated. It is hoped that by adopting this method of qualifying a diver, the unskilled beginner will be encouraged to practice, seek training and become a good diver, and also to have his progress known and to be encouraged to even greater skill. The Council will keep complete records of all its members, and each member's capability as

Although we are presently submerged in quite a bit of rain here in the desert, the visibility and diving at one of the lakes, Roosevelt Lake, not far from Globe and Miami, is reported to be excellent. Canyon Lake. long a favorite of divers in the

Phoenix-Chandler area, has been drained some sixty feet to facilitate work on the dam. Needless to say, the visibility now is terrible, even though the depth still exceeds seventy feet in places. For those divers newly arrived in the area: Roosevelt Lake is about three hours drive from Phoenix. It is most easily reached through the twin towns of Globe and Miami, but may also be reached by following the scenic Apache Trail, passing both Canyon and Apache Lakes. Canyon Lake is about an hour's drive from Phoenix and usually offers excellent diving. Canyon may be reached by following the Apache Trail from Apache Junction, east of Phoenix and Mesa. Apache Lake is located about half way between Roosevelt and Canyon and, when it is reasonably clear, offers excellent carp hunting. Saguaro Lake is the fourth in the area, but is so murky that divers seldom visit this body of water. It is located about an hour from Phoenix on the Payson highway. There are numerous rivers around; however, they are, for the most part, far too shallow to afford much more than getting the feet wet. The divers in the Tucson area will find that the Gulf of California is very convenient and, of course, offers truly fantastic diving, even for the most critical diver. The Tucson clubs hold most of their practice dives at Canyon Lake and then go down to revel in the Gulf Waters. In the north, around Winslow, Clear Creek offers a certain amount of diving. Added to those already mentioned, there are a great deal of smaller lakes throughout the state and most of them have very good diving possibilities, some have not even been investigated as yet.

The Tucson Desert Neptunes are planning a dive at Lake Meade, and hope to be able to visit the underwater town that was flooded when the dam was filled, and lies in about forty feet of water. Reports are that the visibility is very good and the Neptunes hope to get some good photographs.

In February the annual Home and Boat Show will once again have its showing in Phoenix and the Arizona Cactus Divers will have a diving booth. Bill Van Zandt always heads this project with a great deal of success. This year the Cactus Divers hope to obtain a diving tank and give diving dem-onstrations. They will show diving equip-ment and display underwater slides. There are always members present who are eager to answer all questions that may be put to them. The Cactus Divers are also con-nected with the Phoenix Civil Defense Unit and are on call for any emergency.

Any clubs in the State of Arizona that do not now belong to the Arizona Skin Diving Council are sincerely urged to contact this office. It is the Council's most conscientious desire to see the sport of skin diving take its place in the sport's headlines, but it is only with cooperation and unity that this can be accomplished. We need the help of all divers in the state. Let's hear from you

WEST VIRGINIA ...

Mountaineer Skin Divers - Wheeling -Reporter Rose Weidetz-Four members of the Mountaineer Skin Divers, Evelyn Vargo, Howard Posin, Al Weidetz, Sr., and Rose Weidetz, have been experimenting with night diving. We find it very interesting, but we are having a little difficulty with our portable lights, especially at 20 ft. or more. We'd appreciate hearing from any divers who have done night diving.

We wish to extend an invitation to divers coming into our area to contact us, so we can show your our better diving spots. We also have a large portable compressor that can fill a single tank in six minutes.



FOR SALE - Ingersoll 3310 compressor unit. Large filters and storage, 3500 psi service. Will sell all or part. H. Helson, Box 154, Rialto,

INGERSOLL-RAND 3321, three stage compresser, 10 hp gas motor, two 300 cu. ft. storage tanks, filters, condensers, complete hook up, all mounted on metal trailer with roof. Ready to pump. First \$500 takes all. Joe Fabian, 519 S. Main, Naperville, Ill.

HEAVY DUTY air purifler, complete outfit for high pressure compressors to 15 cfm. Spare cartridges included. \$50.00. M. A. Braunstein, 6549 Darlington Road, Pittsburgh 17, Penna. RIX MODEL SS-600 air compressor; 19 cfm at 3500 psi. Water cooled. Completely self-contained with LeRoi engine and Onan generator for electrically reactivating dryers. The best compressor and filter system available for high pressure breathing air. New condition at less than 1/3 new cost. \$1950.00 complete. Paul Maga, 2669 Monroeville Road, Monroeville, Penna.

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INGERSOLL-RAND 3321, three stage, 15 cfm, compressor equipped with 220V electric motor, moisture separator and excellent filtering system. In good condition, complete, ready to use. \$725.00. Marion Main, 848 Claim Street, Aurora, III. Phone TW 6-7221.

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- Cornelius compressor, 3000 psi, model 42017, 110V (AC), new condition, not a "surplus" compressor. \$600.00 or best offer. Russ Conley, P. O. Box 32, Cincinnati 39, Ohio.

BARGAIN — "Aqua-Lung" mistral regulator and 72 cu. ft. tank with J valve. All in perfect condition. Guaranteed. \$80. Write Denis Day, P. O. Box 3123, West Hollywood, Fla.

SUBMARINE, Dolphin Twin. Used six months. Like new. \$250.00. Ann Solay, Box 5361,

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TWO 70 cu. ft. TANKS, one "K", one "R", \$50.00 each. DX regulator, \$40.00. Oxygen inhalator outfit, \$50.00. "Eumig" 8mm camera, battery drive, electric eye lens; ideal to case for underwater; only one control needed, \$70.00. John W. Coursell, 117 S. Maple St., Mt. Prospect, III.

CORNELIUS COMPRESSOR, 2 cfm, at 3000 psi, with filter, \$140.00. Walter Kidde 4 cfm at 3000 psi, with filter (less motor), \$225.00 Write Gary Roberson, 3813 North 32nd Place, Phoenix, Arizona.

Midwest Amphibian Club - Milwaukee -Reporter Richard Jenkins-At the Octo-ber meeting of the Midwest Amphibians, a program was presented by Chief Yeoman Consiglio of the U.S. Navy Recruiting Office. The program consisted of a Navy film on their frogmen operations and a very in-teresting talk by Chief Consiglio who has just completed 41/2 years of active duty on a Navy frogman team.

The November meeting of the club moved

to the Marine Corps League Hall located on 11th and Highland. The program was a film entitled "Blue Continent" which is an introduction to skin diving. Our meetings are open to anyone interested in skin

diving.

TENNESSEE ...

The Memphis Aquanauts-Reporters Hal Sattlethight and John Fisher-The Capital of the Mid-South has the first diving club of this immediate area. We have been organized for several months and have 35 active members. Our president is Bob Chrisman; vice-president, Sam Thompson; secretary, Fay Quinn; treasurer, Joe Barqaichi; divemaster, Russ Browning; beachmaster, Gene Stuart.

We recently participated in a spearfishing meet at Norfolk Lake in Arkansas. Russ Browning brought in our team's largest

catch of carp.

We have been having trouble finding clear water closer to home base, and we would appreciate it if any divers that know of such water would get in touch with us in care of Leslie Stratton, YMCA, 245 Madison Ave., Memphis, Tenn. We would also like to hear from any clubs in the Mid-South area. We have our regular meetings on the first and third Tuesdays of each month.

PENNSYLVANIA . . .

Pittsburgh Scuba Divers-Reporter Jack Mountford-Several club members helped publicize the first showing in the area of 'September Storm" by posing in full diving attire in the front of the theater and later diving in the Alleghany River for three treasure chests. The chests containing gold painted bricks and bonds were recovered. Two bonds were donated to the Children's Hospital and Variety Club with the third retained by the diving group for their treas-

Following the treasure hunt the divers were treated to dinner then displayed their

gear in the theatre lobby.

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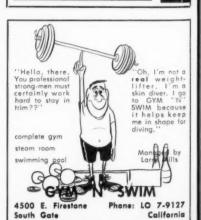
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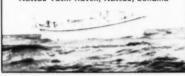
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KENTUCKY ...

Kentuckiana Scuba Divers, Inc.—Louiville—Reporter Gene E. Yost—Our menbership and activities are increasing. The club participated in the Safe Boating West Show on the Onio River. It was sponsored by the local boat clubs and its purpose was to encourage and demonstrate safe water sports to the public.

At the request of Flotilla 1, Coast Guard Auxiliary, divers Roy Bingham, Mickey Brown, Duke Haberer, and Dick Pentecoa helped clear the Municipal Boat Harbor of navigation hazards. Our club had its annual outing at Lake Cumberland, Kentucky. Trophy winners and events were: treasure hunt, Roy Bingham; underwater navigation, Dennis Haberer; spearfishing (two man team), Don Ryan and Gene E. Yost, and spearfishing (largest fish), Kenneth Young.

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Northwest Divers—Chicago—Reporter Hal Wolfe—This will announce to the diving world the birth of a new club, the Northwest Divers of Chicago. Actually we have been in existence for a period of time but have not advertised the fact. We have a nucleus of ten active divers and manage to spend a great deal of time underwater. All of our members are experienced divers with from four to five years of active participation in scuba diving. We expect to remain extremely active right on through the winter months. Anyone interested in obtaining membership in our club contact us at AV 6-8919.

Sunday, October 16th we had an outing at Lake Geneva, Wisc. Visability was exceptional, twenty feet or more.

The Bubblemaster's Diving Club—Granite City—Reporter Mrs. Louise Brown—Both the local Bubblemaster's (adult) and Kingfish (teenage) diving clubs are good examples of the theory that one does not have to live a stone's throw from a large body of water to enjoy the sport of scuba diving. Starting with nine adults, the Bubblemaster's have now 26 active members, the Kingfish Club, 16 active members. Our clubs have bought their own equipment, including an air compressor.

Elected officers for the coming year are president, Ron Homyer: vice-president, Lewis Brown; secretary, Valerie Evenden; treasurer, Don Ballard; air master, Lewis Brown. Appointed by the new president were Al Mueller, training officer and Mr. Louise Brown, club reporter.

Retiring president Al J. Mueller Jr. received the Diver of the Year trophy at our first annual banquet. Mueller, who is the only certified YMCA instructor in central and southern Illinois, wrote a 32-hour training course in scuba. The national YMCA recognized the course, giving it an excellent rating.

Coming events planned for the Bubblemaster's are to train an underwater recovery team to help the local civil defense office and to aid the State Police, adult and teenage classes, salvage work to raise money for the club, and last but not least, a tour 10 Bermuda for diving next summer.

IAPAN ...

Kami Seya Argonauts—Reporter Harold Helpfrey—We officially formed the Kami Seya Argonauts Skin and Scuba Club, on 6 September 1960, with election of club officers at the U. S. Naval Security Group Activity, Kami Seya, Japan.

The primary interest of our club is the proper training and use of scuba. Any training information would be highly appreciated

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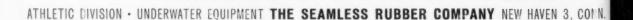
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